SAFETY

SEPTEMBER 1958
Two Sections · Section One

Education

A MAGAZINE FOR TEACHERS AND ADMINISTRATORS

GETTING UP IN THE WORLD

As I See It . . .

The autumn re-awakening of schools and scholars has immense value for safety education. Children, parents, faculties and the general public are in a mood for a vigorous attack on accidents. The enthusiasm they bring to the doors of the schoolhouse has sufficient force to reduce fatal and crippling accidents amazingly.

If parents and the public demand the quality of safety education and accident prevention children deserve, the reduction in accidental deaths and injuries can appropriately rival the inroads medical science has made on disease. They can accomplish much by requesting three basic pillars of school safety. These are:

1. *Retention and expansion of driver and safety education courses and activities now offered and completion of the task of placing these offerings in all schools and at all levels.* Safety education and other education for life needs have broad public support, according to leaders like Lawrence G. Derthick, U. S. Commissioner of Education. This support should lead to the appointment of more safety education personnel and increase favorable administrative attention to the problems of scheduling, certification, provision of facilities and in-service study opportunities.

2. *Improvement in our methods of selecting, educating, certifying, and evaluating safety education teachers and supervisors.* Better advance training, more stringent certification requirements, broad opportunities for study while in service, modern methods of program evaluation and respectable standards of compensation and conditions of employment are needed by those who choose to serve safety as a profession. These needs must be met by improved and more securely financed colleges, universities and other agencies of higher education.

3. *Expansion and improvement of the fundamental research upon which all safety education depends.* Research to serve higher education and the common schools should establish safety as scientific subject matter, improve communications, enlarge understanding in the field of attitudes, and increase the effectiveness of evaluational devices and techniques.

With these three basic principles in mind, we can make safety education and accident prevention the active force it should be. The task is an immense one; we who work in this field know, however, that it must be undertaken with all possible speed and thoroughness.

WAYNE P. HUGHES, PH.D.
Director
School and College Division

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Federal Driver Education Bill Goes to U. S. Congress

THE text of a Federal driver education bill, sponsored by Rep. Kenneth A. Roberts of Alabama, follows. Hearings on the bill were held before the House Committee on Interstate and Foreign Commerce last June 17.

85TH CONGRESS
2D SESSION

H. R. 12804

IN THE HOUSE
OF REPRESENTATIVES

June 4, 1958

MR. ROBERTS introduced the following bill; which was referred to the Committee on Interstate and Foreign Commerce.

A BILL

To promote safety in transportation by motor vehicle in interstate commerce by assisting the States to conduct research into and maintain facilities for driver training programs.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this Act may be cited as the "Driver Training Research and Facilities Act of 1958."

SEC. 2. In order to aid the development and preservation of a national transportation system by highway adequate to meet the needs of the commerce of the United States and the national defense, and to provide for the greatest safety in the use of highways it is hereby declared to be the policy of Congress to promote safety in transportation by motor vehicle in interstate commerce by assisting the States in research concerning, procurement of facilities for, and the establishment of standards, methods, and curricula of driver training programs.

SEC. 3. As used in this Act—

(1) The term "States" means the several States, and the Territories of Alaska and Hawaii, the Commonwealth of Puerto Rico, and the District of Columbia.

(2) The term "Secretary" means the Secretary of Health, Education, and Welfare.

SEC. 4. (a) For the purpose of assisting the States in the development of driver training and research programs, there is authorized to be appropriated for the fiscal year beginning July 1, 1958, and annually thereafter—

(1) $28,000,000 to be apportioned among participating States in the proportion that the population of the particular State bears to the total population of all participating States, determined in accordance with the last preceding United States census; and

(2) such other sums as may be necessary for administrative expenses (including salaries) incurred by the Secretary in carrying out this Act.

(b) Funds appropriated under subsection (a) of this section shall be used only for assisting the States to carry out the following purposes:

(1) Research for securing necessary educational information and data as the basis for the improvement and development of driver training programs.

(2) Purchase or rent of facilities, equipment, training aids, and other necessary supplies (including, but not limited to, driver training programs).

WHEN the Special Subcommittee on Traffic Safety of the Committee on Interstate and Foreign Commerce, House of Representatives, was formed in 1956, its duties were: "to determine (1) the extent to which excessive speed, intoxication, lack of adequate safety inspection of vehicles, insufficiently strict State and local laws, poor conditions of highways and other factors have been responsible for [the large increase in traffic accidents on the streets and highways of the United States during recent years] . . . and (2) the measures which may be taken by the Federal Government to assist in eliminating such accidents or reducing their frequency and severity."

Since then, the Subcommittee, under the Hon. Kenneth A. Roberts of Alabama, chairman, has interviewed scores of people actively engaged in the safety movement—including researchers, educators, insurance men, police and safety officials, doctors, automobile manufacturers, engineers and others—to learn what's being done, what needs to be done in the nation's accident prevention programs. One result: a new appreciation of the possibilities for accident prevention in an expanded program of driver education courses in our nation's high schools.

On these pages is reprinted a bill proposed in the U. S. House of Representatives last June 4 by Congressman Roberts, declaring it a policy of Congress to assist States in research concerning, procurement of facilities for, and establishment of standards, methods and curricula of driver education programs; and establishing an appropriation of $28 million per year for states to share in implementing this policy. The bill was referred to the Committee on Interstate and Foreign Commerce, and hearings on it were held last June 17. Reports of these hearings had not been released at the time of this publication.

(3) Assistance in the promotion of training methods and in the establishing of proper curriculums through workshops, conferences, short courses, and related methods.

SEC. 5. (a) In order to secure the benefits of the appropriations provided for in section 4 (a) of this Act, a State must, through its legislative authority, accept the provisions of this Act, and designate or create a State board, consisting of not less than three members and having all necessary power to cooperate with the Secretary, in the administration of the provisions of this Act.

(b) The State board, in order to secure the benefits of the appropriations authorized by this Act, shall prepare plans showing with respect to the proposed use of such appropriations—

(1) the kinds of driver research training programs it proposes to conduct.

(2) the type of facilities, equipment, aids, devices, and supplies it proposes to purchase or rent.

Such plan must also provide that the appropriations made available under this Act shall be used only in connection with driver education given in schools or classes under public supervision or control. Such plans shall be submitted by the State board to the Secretary and if the Secretary finds them to be in conformity with the provisions and purposes of this Act it shall approve such plans. The State board shall make an annual report to the Secretary on or before September 1 of each year on the work done in the State and the receipts and expenditures of money under the provisions of this Act.

SEC. 6. A State, in order to receive the benefits of this Act, must match by State or local funds, or both, 100 per centum of the appropriations available to it under this Act.

SEC. 7. (a) No part of any appropriation made under authority of this Act shall be expended in such a manner as to utilize the services of driver trainees for private profit.

(b) Not more than 33⅓ per centum of the amount appropriated in any year for each of the purposes specified in section 4 (a) shall be used for the purchase or acquisition of equipment.

SEC. 8. (a) Each participating State shall, through the legislative authority thereof, appoint as custodian for appropriations made under authority of this Act its State treasurer, who shall receive and provide for the proper custody and disbursements of all money paid to the State from such appropriations.

(b) The Secretary of the Treasury through the Division of Disbursement of the Treasury Department shall, upon the certification of the

A Driver Education Feature

Secretary, pay, in equal semi-annual payments on the first day of July and January of each year, to the custodian for driver training programs of each State, designated as provided in subsection (a), the moneys to which the State is entitled under the provisions of this Act. The money so received by the custodian for driver training programs for any State shall be paid out on the requisition of the State board as reimbursement for expenditures already incurred to such schools and other organizations as are approved by the State board and are entitled to receive such moneys under the provisions of this Act.

SEC. 9. (a) Whenever any portion of the fund annually allotted to any State has not been

(Continued on next page)

Marian Telford, Pioneer in Safety Education, Retires

MARIAN TELFORD, senior specialist with the National Safety Council, retired June 1.

Miss Telford joined the National Safety Council in 1925 as field secretary with particular interest in school safety education. She continued in that capacity during the years that the Education Division, financed by the Association of Casualty and Surety Companies, was headquartered in New York.

In 1938, she was moved to Chicago to head up the School and College Division and served in that capacity until 1944.

In her years with the Council, Marian worked with school authorities, parent-teacher groups, safety councils, and state departments of public instruction in every state and hundreds of communities.

She served as national safety chairman of the National Congress of Parents and Teachers directing the P-TA Traffic Safety Project financed by the Automotive Safety Foundation. For several years, she taught a course in safety for teachers during the summer sessions at Columbia University.

Recently, Marian's chief responsibilities have been with the Standard Student Accident Reporting Committee, the School Transportation and School Plant groups, and with the School Section of the Annual Inventory of State Traffic Safety Activities.

amateur rocketeers need state license . . .

The Indiana State Aeronautics Commission must approve all amateur rocket launchings from now on, according to a regulation recently approved by Governor Harold W. Handley.

The approval will be required on the amateur rocket launching sites and operation range as well as on any actual firings.

One of the reasons for the new regulation: a number of "near misses" with aircraft have been reported when rockets have been fired near airports and through cloud banks near where airplanes were operating on instruments.

Federal Driver Education Bill *(Continued from preceding page)*

expended for the purposes provided for in this Act, the sum equal to such portion shall be deducted by the Secretary from the next succeeding annual allotment for such fund to such State.

(b) Whenever the Secretary determines that the allotment of moneys to any such State is not being expended for the purposes and under the conditions provided for in this Act, future allotments of moneys to such State shall be withheld. Whenever an allotment is withheld from any State, the State board of such State may appeal to Congress, and if Congress shall not direct such sum to be paid within one year from the date of such appeal, the sum shall be covered into the Treasury.

(c) Whenever a custodian appointed under authority of section 8 (a) certifies to the Secretary that his State does not require all or any part of the sums apportioned to it under section 4 (a) (1), the sum not so required shall be reapportioned among the remaining participating States.

SEC. 10. If any portion of the moneys received by the custodian for driver training of any State, for any purpose specified in this Act, shall be diminished or lost, it shall be replaced by such State, and until replaced no subsequent appropriation for such education shall be paid to such State. No portion of any moneys appropriated under this Act shall be applied, directly or indirectly, to the purchase, erection, preservation, or repair of any building, or for the purchase or rental of lands, or for the support of any religious or privately owned or conducted school or college, or for the payment, directly or indirectly, of any salary, other than a salary authorized to be paid under section 4 (a) (2).

SEC. 11. The Secretary shall make an annual report to Congress on or before December 1 of each year on the administration of this Act and shall include in such report the reports made by a State board as provided by section 5 (b) of this Act.

Since the mid-'20s, research in safety education has been disclosing important facts about attitudes, teaching methods, safety curricula. Here, the author summarizes what we have learned from salient research studies conducted throughout the nation in the past 23 years.

Research in Safety Education

RESEARCH means different things to different people. A student preparing for an assignment might consult several sources for information on his topic, then remark, "I've done research!"

Is this research? Yes, but it involves only one of the processes of true educational research. The manner and spirit in which the information is obtained, treated and interpreted makes it research. It is important that before something is called *research* it follow well-defined patterns, which include (a) careful planning, (b) thorough, accurate investigation, and (c) sound interpretation.

Tracing the development of research in safety education should tell the why, who, what, when, where and how of all studies to reveal a complete picture. More than this, one should know the effect each study had on the nation, the community or the researcher. But this is difficult to determine because of the time between completion of a study and application of its findings.

Research in safety education began in the mid-20's. It was conducted both on a non-degree basis, by personnel for a particular industry, and by graduate students pursuing an advanced degree at a college or university.

Early industrial research was conducted by casualty insurance engineers and was concerned with industrial accident costs. They found that accident costs were four times greater than the direct costs of compensation and medical aid. This is referred to today as "the four-to-one accident cost ratio."

Early industrial research also discovered that "a positive correlation exists between safety performances and efficiency of production" and "the safe worker is the efficient worker and vice versa." Some now-common concepts based on research are: "Accidents don't happen; they are caused;" "The causes of accidents must be known before they can be eliminated;" and "accidents are primarily caused by unsafe acts of individuals or unsafe environmental conditions."

The 1925-1930 period was a time of awakening—when industrial research workers sought answers to the accident problem in a scientific manner—when safety instruction in schools was considered relatively unimportant until the public realized that accidents were taking thousands of lives of school-age children. Early research studies encouraged schools to incorporate safety education into the school curriculum.

The number of non-degree safety studies that have been conducted is not known, except for approximately 1,000 research projects—mostly in industrial safety—reported in various professional publications. If you're interested, refer to *The Human Element in Industrial Accident Prevention*, published by the Center for Safety Education at New York University.

Some 386 studies since 1925 have satisfied requirements for advanced degrees. These included 307 masters' theses and 79 doctoral dissertations. Almost one-third of the total number of studies in safety education have been produced in the last seven years.

(Continued on next page)

RESEARCH IN SAFETY EDUCATION BY AREAS AND EDUCATIONAL DEGREE LEVELS

Areas	Degree Level		Total
	Masters	Doctorates	
General Safety Program	78	25	103
Driver Education and Traffic Safety	67	22	89
Athletics, Physical Education and Recreation	72	10	82
Industrial Arts	54	5	59
Pupil Transportation	9	3	12
Psychological and Measurement	1	7	8
Safety Patrols	8	0	8
Fire Safety	6	1	7
Liability	4	2	6
Home and Farm	3	1	4
Teacher Preparation	2	2	4
First Aid	3	1	4
TOTAL	307	79	386

Research in Safety Education

(Continued from preceding page)

Analysis of these 386 studies reveals that certain areas of safety education have received a great deal of attention while others have been relatively untouched (see chart). Psychological aspects, home and farm safety are particularly lacking in number of studies made.

The studies have been produced by 80 institutions of higher learning. New York University is responsible for the most doctoral studies, followed by Columbia University and Indiana University.

More than 80 per cent of the studies were of the normative survey type. Literature surveys, questionnaires, accident report analyses, observation and group testing were the techniques used in obtaining data. There were only a small number of experimental studies until 1950, but there have been many more—particularly in driver education and traffic safety—since.

Concepts Derived from Safety Education Research—General Safety Program.

1. Safety education is not merely accumulating facts but a process of modifying or changing behavior to the extent that a person can do whatever he wants to do safely.

2. *Actions* rather than words, *showing* rather than telling, *illustrating* rather than explaining are considered the "keys" to safety instruction.

3. School safety instruction is organized and administered in various ways throughout the United States. The methods used or advocated: emphasis in established subjects; as a separate subject; through pupil safety organizations, homeroom periods or "incidental" instruction. *There is no evidence that safety education objectives can be achieved better by correlation than by offering safety as a separate subject, or vice versa.*

4. Safety instruction lends itself to a variety of teaching methods; no one of them best.

5. Although positive instruction has become popular, no objective basis exists for the current interdict against negative language forms. There is very limited evidence which suggests that negative language forms are slightly more effective than positive forms.

6. Analysis of pupil activities and the study of where, when, how and why accidents occur seem to be the best basis for subject matter content. It is essential that all accidents be reported and that accident reports be used as constructive devices in improving the school safety program.

7. The widespread use of school safety patrols indicates that school authorities are receptive to modern educational philosophy which stresses learning by doing and developing good citizenship qualities. Although non-school authorities sometimes have the responsibility of supervising patrol members, safety patrols should be under direct supervision of school authorities.

8. Failure to assign major responsibility for the organization, direction and supervision of the safety program to one individual may handicap the program so severely that its success will be hampered. The title assigned to this individual may be supervisor, director, consultant, coordinator or any other title which concurs with local administrative policies.

9. Schools can scarcely realize successful safety programs without enlisting the aid of outside agencies interested in promoting safety. A care-

ful check should be made, however, to determine if services extended by such organizations are worthwhile and educationally sound.

10. The provision and maintenance of a safe school environment is an important phase of a school safety program. All school personnel must do their part in keeping buildings and grounds in safe condition. This entails periodic inspections and good housekeeping.

11. Safety is a dominant factor that must be given utmost consideration in the transportation program. Essential features: safe buses; competent bus drivers; safe transportation routes; legislation governing the actions of motorists who approach school buses stopped to load or discharge pupils; a safety education program regulating pupil conduct on entering, riding and leaving the bus; and sound business practices.

12. The nature of the fire problem necessitates year-round fire safety instruction. A desirable program includes: a safe environment, standard rules and regulations, instruction in fire prevention and protection, fire drills, and cooperative community action.

13. Besides an instructional program of first aid, first aid materials must be available, along with a qualified person to administer it to injured persons.

14. Teacher education colleges have lagged far behind the needs of public schools in the preparation of safety teachers. The development of college training programs has been slowed by the failure of state and local educators to give deserving recognition to safety education.

15. In the absence of a statute, the prevailing principle of law is that a school district or board is not subject to liability for pupil injuries. Individual school employees, however, are subject, if negligence can be shown. School employees should be familiar with the principles of liability protection of themselves and the school.

Athletics, Physical Education and Recreation

1. Many activities in this area are hazardous by nature, but danger and adventure make them alluring. More than half of the accidents which occur are not due to the inherent dangers, however, but to improper facilities and equipment and poor leadership.

2. Football causes more deaths and injuries than any other inter-scholastic activity, but football's dangers have been exaggerated. Tackling, blocking and being tackled are specific skills in which most injuries occur. Fewer football injuries occur among teams who play opponents "in their own class."

3. Insurance companies were initially reluctant to enter the athletic insurance movement, so many state high school athletic associations developed their own plans to meet the cost of athletic injuries. Limited evidence suggests that athletic injuries receive better care when insurance covers the cost of treatment.

4. Physical examinations are essential for those participating in strenuous physical activities.

5. Constant supervision and instruction and frequent inspection of all apparatus and equipment are essentials of playground safety.

Industrial Arts and Vocational Education

1. Industry aided school personnel in building programs of safety in school shops. Although industrial assistance provided for safety programs it does not follow that strict industrial standards are wholly applicable in appraising local shop conditions.

2. Methods of safety instruction in school shops vary, and no one best method has yet been developed. Highly regarded methods are (a) demonstration in the proper use of tools and machines, and (b) the use of safety rules.

3. The grade level for use of different machines in school shops rises in accordance with the degree of danger associated with each machine. Basically, a student should not be granted permission to use any machine until he is 100-per cent informed about its use.

4. It is essential that shop instructors closely observe students for signs indicating unsafe practices; undue haste, particularly.

5. Machine guarding, inspection of tools and machines, provision of personal protective equipment, maintaining good housekeeping practices, administering physical examinations and a program of safety instruction are essential features of a shop safety program.

6. Teacher training institutions have been deficient in setting good examples for prospective shop teachers.

Driver Education and Traffic Safety

1. Although early research studies emphasized the importance of faulty attitudes as a major

(Continued on page 40)

A SAFETY EDUCATION RESEARCH FEATURE

By Charles Peter Yost
Visiting Lecturer and
Director, Safety Education
University of Wisconsin

By Victor Leonard

What are modern day "pressures" doing to our children? Too much hurrying, too many schedules, activities, demands for time seek to make adults out of little children too soon, cause nervousness—and accidents, says the author, who recommends: Give them time to grow, develop, appreciate.

Accidents and

WHEN Carol woke up Monday morning, it was late. Her mother, rushed for time because there was a P-TA committee meeting that morning and volunteer work in the afternoon, rushed Carol and her brother John through their breakfast and hurried them off to school.

John didn't wait for his sister when she stopped to examine a dandelion on the way, and, deep in thought about the Brownie outing that afternoon, she walked right into a car that was turning the corner three blocks away from her home.

Carol wasn't hurt seriously, but she was out of school for a day because of the accident. Though neither she nor her mother realized it, Carol was a victim of the "hurry" pressures of our modern day.

The safety of our children is of vital concern to all of us. Recently, hundreds of safety educators—members of the Elementary School Section and representatives of safety-minded educational organizations — were asked about the effect of the "pressures of modern day life" on our children—what these pressures are, how our children react to them, and how they cause accidents.

The basic concept of pressure as a factor in accidents comes from Miss Elsa Schneider, specialist in health, physical education and recreation with the United States Office of Education, and Miss Vivian Weedon, senior consultant with the National Safety Council.

There is no doubt that the pressures of our modern way of life contribute to the accident rate. Let us use "pressures" in the sense of the exertion of continuous mental or emotional forces on a person, and see what these educators feel it is doing to our children of today.

First of all, there is the pressure of *time*. Children must dress, have breakfast and arrive at school on time. If they ride a bus, they must meet it on time, before and after school. If they ride a bicycle, they may leave later and hurry to get there on time. Many communities are slaves to the car pool routine. Mothers load the car with their own and neighbor's children and rush them to school.

This pressure of time can be too much for a child. Time is always of the essence, and accidents often result. The child pedestrian who runs across the street or takes a short-cut because he is late is susceptible to accidents. Adults rushing to their places of work are often nervous, anxious and inattentive. All of these factors, in the opinion of educators, cause accidents.

A second pressure is that of *noise*. We believe in a noisy atmosphere. Loud and unusual

noises become distracting influences, resulting in nervous reactions. Accidents result. Some people feel we are acclimated to noise and it is not a pressure on our youngsters. But excessive noise on the playground, in traffic, and wherever folks congregate can become an accident-producing situation for the youngster who is not used to disturbance.

The pressure of *schedules* can also be a cause of accidents. Some believe our modern youth is over-supervised and over-active. The children have far too many scheduled commitments. They must hurry to ballet class after school. The dental appointment must be kept on schedule. Scouts just can't be late for their sessions. Dramatic and music lessons are maintained on a tight schedule—all causing the child *and* the parent to rush.

Victor Leonard, principal of the North Mianus Elementary School in Greenwich, Connecticut, is chairman of the Elementary School Section of the National Safety Council, past chairman of the Operational Procedure Committee of the Section and past member of the Evaluating Committee of the National Safety Congress.

The "Hurry, Hurry" Habit

An over-supervised child becomes tired and often bored with the long list of activities. He is confused and harried by the constant pressure of "the schedule." Accidents may result because a child is less alert as he rushes to meet a scheduled event. There has to be time for rest, relaxation, for meals and normal "quiet" activity. On the other hand, some think the lack of supervised programs may cause the child to indulge in activities that are hazardous.

The "Keeping-up-with-the-Joneses" pressure is a product of our present mode of life, too. Our children are led to want a bigger and faster bicycle than their neighbor's. They have an intense desire to own a more potent chemistry set or a more intricate backyard gym set. The possession of a more powerful rifle or gun by the young hunter is another yearning. All of these have definite accident implications.

Academic pressures have become part of the American way of life. Since the advent of Sputnik, there has been a great clamor for greater stress in certain subject areas. Parents are continually flooded with propaganda about the deficiencies of our educational standards as opposed to the competence of our neighbors on the other side of the world. The desire to excell their colleagues too often becomes a dominant obsession with our young people—and frequently causes foolish accidents. There is an emotional tie-in for the slower youngster who cannot achieve as well as his classmates. Many children are not able, physically or mentally, to work at the high standards that are being proposed in many school systems. This may cause nervousness, fatigue and distractions—all factors in accidents.

Many of our pressures are caused, of course, by adults. One of these is the "miniature-adult" concept. The child *must* be an outstanding athobsession with our young people—and frelete, he *must* be a child prodigy and perform at a high level in music, art or dancing. He *must* take part in *all* the activities offered so that the parent may have a feeling that his child is superior. All of this "pushing" causes emotional disturbances, and, thus, accidents.

Many adults in today's world are constantly concerned with the fear that Russia is going to surpass us in the "battle for supremacy" in space. They worry about the situation in the Middle East, too, and justifiably so. It is important, however, both for us and for our children, that these worries be kept in their proper perspective, and that our children be given every opportunity to grow up as normal and happy as is humanly possible.

The consensus of our colleagues is that we should lessen the pressures of this modern era on our offspring. We must stop making the child do what *we* want him to do. Every child should have the right to develop and grow as a child. There is time for adulthood, with all of its worries and complications. It behooves all of us interested and active in the safety movement to fight this battle against the pressures that cause injury to children●

Balanced

Biggest of all school safety meetings to feature important sessions on safety education research, driver education, college safety, school bus accident prevention, problem-solving. Here is a summary of what you will be doing at the coming National Safety Congress.

FACTS—experience—discussion—research—in safety education.

Those are the key words that describe the coming School and College Sessions of the 46th National Safety Congress and Exposition, to be held at the Morrison Hotel in Chicago, October 20-24.

If you want to learn more about safety education—if you want to improve your accident record and the safety programs in your schools—if you want to know what's being done in safety education in other places—to rub shoulders and discuss accident problems and programs with other safety educators from all over the nation—make a reservation *now* for this largest of all safety meetings. Approximately 12,500 people are expected in Chicago for the Congress. On October 20, you'll be glad you made a reservation early!

A well-balanced menu of thought-provoking talks, discussion groups and problem-tackling sessions delving into the facts of accident occurrence and educational retention, experience of school systems in meeting accident problems with dynamic new safety programs, and research being done to bring basic needs of safety education to light, will mark the School and College sessions this year.

Threaded through the week's observance will be observance of the tenth anniversary of the National Safety Council's Driver Education Section. The event will be celebrated officially first at a general reception on Monday afternoon, honoring a pioneer in the driver education movement and in the Driver Education Section, Amos Neyhart. Climax of the observ-

Program Marks '58 Congress

ance will be the closing luncheon-general session on Thursday noon, when past general chairmen and past Council staff representatives to the Section will receive special reognition.

The week's events, *planned by school safety supervisors, teachers and principals who know what type of information they need and want,* will cover a broad area of safety education. The 17-member Congress Program Planning Committee headed by Dr. J. Duke Elkow, associate professor of health and physical education at Brooklyn College, has worked out a program which is full of opportunities for the professional and personal enrichment of school people interested in safety. A partial list of the offerings includes:

GENERAL SESSIONS

Monday afternoon—First Annual Gordon C. Graham Memorial Lecture: "Current Pressures on Safety Education."

Also, a talk on: "Special Safety Problems of Recently Expanded Communities."

Reception noting the tenth anniversary of the Driver Education Section and honoring Amos Neyhart for his 25 years in driver education.

Monday evening—Merry-Go-Round Sessions. Three 40-minute meetings, the first half of each meeting devoted to a presentation of a subject by a leadership team, the second to discussion between team and audience. Subjects:

(1) "How Can Safety Attitudes Be Developed?"

(2) "Motorized Bicycle and Scooter Operators: Licensing, Control and Education."

(3) "Science 'Explosions': Their Safety Educational Implications."

(4) "Safety in the Practical Arts."

(5) "Post Mortem: A Discussion of the Subjects Presented in the First General Session."

Tuesday afternoon—Research session featuring reports of and results of studies in nontraffic safety education. One of the most important meetings of the Congress, this session will let safety educators in on the latest findings of research studies in safety education.

Thursday morning—Session on research being carried on in driver education, reports of ongoing studies, results of completed studies.

Thursday noon—Luncheon-general session honoring the Driver Education Section. Honored guests: past general chairmen and past staff representatives of the Section. Three speeches: "Solid Contributions Made by the Driver Education Section in the Past 10 Years," "Next Steps and Priorities for the Section and Driver Education," and "Morality—the First Code of the Road."

ELEMENTARY SCHOOL SESSIONS

Last year, elementary educators asked for the facts. This year, *Tuesday morning* sessions will

(Continued on next page)

PROGRAM CHAIRMEN FOR 1958 SCHOOL AND COLLEGE SESSIONS

F. R. Noffsinger Driver Education | *Lillian Gilliland* Elementary Schools | *Herbert Stack* Research | *J. Duke Elkow* General Chairman | *Mark Dondero* Campus Safety | *Leonard Rollins* Safety Supervisors | *John Hill* Higher Education

Not pictured: John TePoorten, American Vocational Association-National Safety Council Joint Committee

Balanced Program Marks Congress

(Continued from preceding page)

determine what we *know* and what we *need* to know. Group discussions will center around how the facts can be used in day-to-day elementary safety education, how elementary educators can help get more of the facts they need to know.

On *Tuesday afternoon,* after attending the general research session on non-traffic safety education, elementary educators will once again meet in groups to discuss how they can use this research in the classroom to improve teaching.

Tuesday evening, the elementary school program will be given over to entertainment honoring the Driver Education Section's tenth anniversary. The entertainment will feature elementary school pupils from Chicago's Roman Catholic Schools. Later on, those attending will hear two prominent safety educators speak on (1) "The Elementary School Contributes to Traffic Safety," and (2) "Baked and Half-Baked Ideas for Improving Traffic Safety in Elementary Schools."

DRIVER EDUCATION SESSIONS

Though driver educators will attend the Congress all week, specific driver education sessions will be held all day and into the evening on *Wednesday and Thursday.* Well-known educators will take part as resource persons in panels and symposiums and review the past, the present and the future of driver education.

Headlining a program rich in subject matter of controversial and practical interest to all those interested in driver education are talks on "Why the Driver Education Section Was Created," "A Report on the Third National Driver Education Conference," "Standards for Adult Driving Schools," 'Why Driver Education Teachers Quit," "Pre-Driver Education" and "Let's Try 'Teen' Traffic Courts."

HIGHER EDUCATION SESSIONS

Educators in our nation's colleges and universities will find themselves in one of three interest areas of safety at the college level: (1) research being carried on; (2) safety in the college curriculum, and (3) accident prevention on the campus, sponsored by the Campus Safety Association.

Tuesday, a research session will feature presentations of recent doctoral dissertations applicable in schools or for school use. Other meetings will explore "Considerations in Applying Safety Teachings in the Age of Space," and "Organizing University Safety Centers."

Wednesday morning sessions will particularly concern participation of college students in safety programs: the problem of panic and its prevention in fire and other emergencies, the sports car problem, campus safety campaigns and college newspaper safety contests.

Wednesday afternoon, two symposiums will delve into climatic influences in a campus safety program: including specific problems of colleges in the north and in the south. Those attending will split into two groups according to the location of their colleges, gather together afterwards for a meeting of the Campus Safety Association.

Organizational meetings of the Research Committee and the College Education Committee of the newly-formed Higher Education Section will also be held on Wednesday afternoon.

SCHOOL TRANSPORTATION SESSIONS

Tuesday morning, school bus accidents—how we find out about them, how we learn more about them, how to make use of the information we have—will occupy the attention of those people attending the Congress who are responsible for the safety of children who use school transportation to go to and from classes. There will be a report on the school bus tragedy that occurred in Kentucky this past winter.

Other school bus sessions will encompass gathering and using data on school bus accidents, miscellaneous school transportation problems and practical problems in school bus maintenance and inspection.

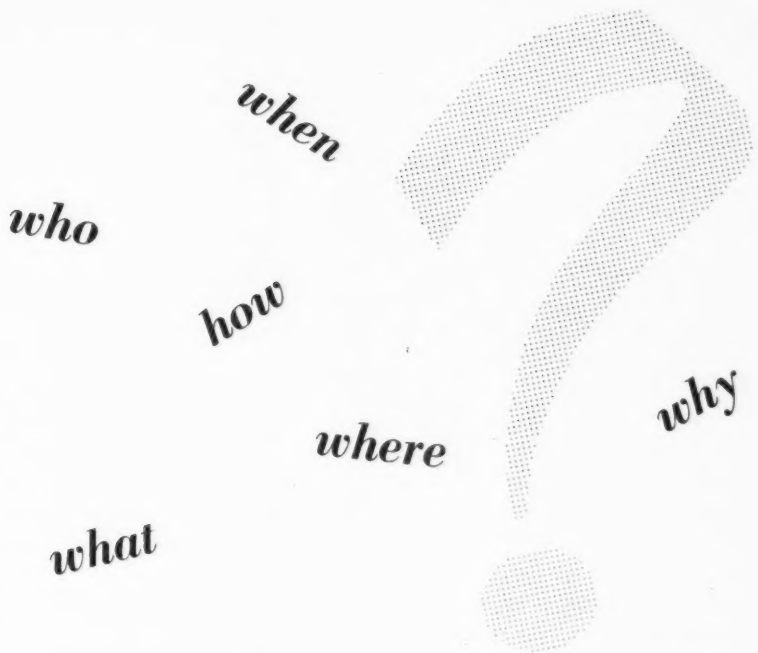
SAFETY EDUCATION SUPERVISORS' SESSIONS

"Extra-Orbital Problems in School Safety Education" will concern safety education supervisors at the special session of the Safety Education Supervisors Section on *Tuesday evening.*

Among "extra-orbital" problems to be discussed: "Leadership and Communications Between the Safety Education Supervisor and the Building Safety Coordinator," "What I Think About Science Experimentation in Safety," and "What Should I Do About This?", a session in which any school safety program problems can be brought up for general discussion towards a solution.

A highlight of the session will be a discussion of television teaching in driver education led by Cincinnati, Ohio, school safety educators who have conducted their regular driver education course over television for two years. The program will feature kinescopes of the television

(Continued on page 40)



. . . are the Accidents Happening?

A New York State survey of accident records in 92 public elementary schools gave safety educators some revealing answers on how accidents were happening. Their findings should be of interest to you, too. . . .

THE protection of children from serious accidents and the conservation of the health of pupils have long been recognized as one of the school's primary responsibilities.

This principle was adopted as one of the goals set up in the Children's Charter by the White House Conference of 1930 under the leadership of the President of the United States and has increasingly gained recognition in schools.

The tremendous toll of accidents, including death, physical and mental suffering and financial losses, has focused the attention of many official and voluntary agencies on this acute problem. However, since the school is the community's most effective agency for educating all children, it must assume a major role in education for safe living. Of primary importance in this responsibility are the development of a safe school environment with constant supervision thereof and the development of practices and attitudes conducive to safe and healthful living in the school, home and community.

Elementary school administrators are evermindful of these responsibilities and are continuously seeking suggestions that will help them in this task. Sound research, however, is a prerequisite to the development of valid recommendations.

This study provides the data on the status of certain safety practices among elementary school children in a selected sample of schools in New York State.

Purpose. The purpose of this study is to determine by a survey of a selected sample of schools of New York State the nature, frequency and the contributing factors of accidents among elementary school children.

(Continued on next page)

GERALD J. HASE, author of this article and the man who made this survey, is supervisor of physical education and recreation for the New York State Education Department.

what?

(Continued from preceding page)

Need for the Survey. It has been generally recognized by educators that one of the school's first responsibilities is to offer security and freedom from danger for all of its pupils. Therefore, it is one of administration's first concerns to work closely with the entire staff in providing a safe school environment.

During the school years of 1951-52 and 1952-53, the Division of Health, Physical Education and Recreation held 64 area conferences throughout New York State. These meetings were held for administrators, teachers, board of education members and parents to discuss problems in health and safety, physical education and recreation. Many of the topics submitted for discussion were in regard to the safety of pupils. Some of the problems listed include:

- What playground apparatus is desirable for pupils of the elementary school?
- Should asphalt or a more resilient material such as sand or sawdust be underneath playground apparatus?
- Where do most of the elementary school accidents occur?
- When do most of the elementary school accidents occur?

These and many other similar questions show the concern of many people about safety problems and how they affect the lives of their children. The information obtained from this survey should aid in the solution of these problems.

Limitations of the Survey. For the purpose of this survey, the study was limited to 92 public schools of the State with no elementary schools of New York City being represented. Only those schools housing elementary grade children and having an average daily attendance of more than 100 pupils were included.

The study was confined to accidents that occurred within the school building or on the school grounds during regular school time or in a school activity supervised by a teacher, supervisor or administrator before or after regular school hours.

The only accidents reported were the ones that occurred to children who had a followup or referral after first aid was rendered.

Due to the nature of the elementary school program, it was felt that each pupil could be counted as only one exposure in any one activity during any one day. Regardless of the number of times a pupil participated in a single activity in one day, it still was counted as one exposure for that day. However, if a pupil participated in another activity during the same day, it would count as one exposure for that other activity. Thus it was possible for a pupil to be counted as an exposure more than once in a given day, but the exposures would have to be counted in two or more activities.

The data were collected for eight months of the school year 1954-1955, extending from October 1, 1954, to May 31, 1955.

SUMMARY OF FINDINGS

There were 524 accidents reported in the 92 schools during survey period, with the average number of accidents per school being 5.7 and the most frequent number being two. It was also noted there were 46 schools, 50 per cent of the total, that reported three or less accidents. These findings indicate that the 92 schools seem to be doing very good work in the prevention of accidents to elementary school children.

why?

Factors Directly Related to Accidents. The greatest number of accidents occurred during the months of May and October when there were 172 accidents, approximately 33 per cent of the total. This may be due to the fact that the climatic conditions are such that during these two months children may be participating more in vigorous outdoor physical activities. The fewest number of accidents were reported during the month of February, when only 49 cases were reported, approximately nine per cent of the total.

The fifth grade had the greatest number of accidents for any single grade with 94 recorded, while the intermediate grades reported an aggregate of 247 accidents, approximately 48 per cent of the total. The special class pupils had only three accidents, which would be reasonable to expect since only a very small number of pupils in this class were included in the survey.

The third and fifth grades had the greatest number of accidents for both boys and girls, with a total of 118 for boys and 66 for girls. The total number of accidents for boys in all grades was 340, while for girls in all grades it was approximately half this number, or 184. Other related studies reported similar findings with approximately twice as many accidents occurring to boys as girls.

The eight-year-old pupils experienced the most accidents, with 93 being reported for this

age while the age group of eight through eleven had 335 accidents, approximately 64 per cent of the total number.

There was only one accident recorded for the four-year-old pupils. This may be expected, since there would be only a few children of this age in the schools because of the required age of beginning pupils in New York State. It is necessary in most school districts for a child to be five years of age on or before the first day in December.

who?

There is a very high positive relationship between boys and girls in the matter of frequency of accidents occurring from age to age and grade to grade.

The head was the part of the body most frequently injured, with 312 cases, approximately 56 per cent of the total. Other studies have also reported that this part of the body is the most frequently injured among elementary school children.

The wound was the most frequent type of injury, with 218 cases, 40 per cent of the total number. The wound, bruise and fracture were the three most common types of injuries, contributing 461 cases, approximately 85 per cent of the total number.

The morning and noon were the times when most of the accidents occurred. During these two periods of time, there were 354 accidents, or approximately 68 per cent of the total.

There were 371 accidents, approximately 71 per cent, that resulted in no days lost from school. But 485 accidents, approximately 93 per cent of the total, resulted in the loss of two or less school days. It appear that most of the accidents that occurred were not serious enough to cause long periods of absence from school.

Most of the accidents occurred on the playground and in the gymnasium. These two places accounted for 337 accidents, approximately 64 per cent of the total. Other related studies reported similar findings in regard to place of accident occurrence. This may be expected because of the nature of the vigorous physical activities that occur in both of these areas.

The most serious accidents, determined by average number of days absent from school, occurred at the bicycle rack area, stairway, athletic field, doorway and school sidewalk. Although there is a fairly high positive relationship between frequency and seriousness of accidents, it should be noted that the playground and gymnasium, which rank first and second in number of accidents, rank seventh and sixth in severity of injury.

where?

The largest number of accidents occurred to pupils during free play, when there were 226 cases reported, approximately 43 per cent of the total. Physical education activities were reported for 157 accidents, 30 per cent of the total. Due to the nature of the free play period in the public school—characterized often by the freedom of choice in activities, the lack of direct supervision for all activities, and the large number of pupils in one area—it may be expected that the most accidents would occur at this time.

The class period and the noon-hour accounted for 346 accidents, 66 per cent of the total. During the recess period, approximately 18 per cent of the accidents happened, while approximately four per cent occurred during the toilet period. It is not surprising that many of the accidents occurred during the class period. The greatest portion of a pupil's time is spent in a class situation, of which a portion of the time is spent in vigorous physical activities. Many accidents would, naturally, occur during the noon hour and recess play period because of the large number of pupils and the free play that frequently characterize these two parts of the program. The number of accidents during the toilet period may be due to the remoteness of the toilet facilities from the classroom and the lack of direct supervision by the classroom teacher.

The classroom teacher was in charge when about 59 per cent of the accidents happened, probably because the greatest portion of pupils' time is spent under the supervision of a classroom teacher.

The physical education teacher was supervising the activity when 28 per cent of the accidents happened. The fact that the schools reported approximately 11 per cent of the accidents occurring when there was no one supervising, or when there was a non-certified person in charge, indicates a fairly high reliability of the data submitted by the schools.

The greatest number of accidents occurred when the group of exposed children numbered 16 to 30.

The supply and equipment involved mostly in accidents were the ball and the swing. There

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Where Are the Accidents Happening?

(Continued from preceding page)

were 38 accidents, 22 per cent of the total, with the ball, and 15 accidents, 8.7 per cent of the total, on the swing.

One hundred forty-nine accidents, about 28 per cent of the total, happened because of an interrelation with other pupils. Of these, the greatest number happened when one pupil collided with another pupil. Equipment or supply were involved in 144 accidents, about 27 per cent of all. Of these, the most were caused specifically by a pupil being struck by a piece of equipment or supply.

The physical plant was a factor in 131 accidents, about 25 per cent of the total. Of these, the greatest number were caused when a pupil slipped on the floor or the ground●

Part Two of this article will appear in the October issue of SAFETY EDUCATION.

Oregon Sets New Requirements for Its School Bus Drivers

EVERY school bus driver in Oregon will be required to have a special annual school bus driver's license by November 1, according to Department of Motor Vehicles director James F. Johnson.

The stepped-up school bus safety program is a result of a need for stricter regulations, Johnson said. Near the end of the last school year, a school bus driver died of a heart attack, and his bus careened off a mountain road shortly after unloading about 50 children.

Requirements for obtaining the special school bus operator's license, as outlined by the department, include appearing before a driver license examiner and filing application for the special license, written examinations, visual tests and a complete physical examination.

In addition, prospective school bus drivers must have a valid driver's license and current chauffeur's license. Prospective drivers must also be able to demonstrate their ability to operate any properly equipped vehicle.

An in-service training program for school bus drivers has also been set up.

The written examination consists of a questionnaire covering motor vehicle and chauffeur laws as well as school bus laws and regulations. Preparation for the written test is use of the driver's and school bus manuals.

At the conclusion of all other tests, prospective school bus drivers will be presented with physical examination forms. Physical examinations may be taken from the driver's family doctor or from a doctor arranged for by the school district or school bus contractor.

Along with the special license, the Department of Education and the Department of Motor Vehicles will conduct jointly the in-service training program. Classroom sessions, currently set for a two-hour minimum, will be held in the various school districts. Methods and procedures for school bus operation, traffic laws and regulations, films and visual aids will be presented at the training program sessions by teams of instructors.

Do You Have Your NSC Membership Card?

SCHOOLS and individuals subscribing to SAFETY EDUCATION Magazine are entitled to membership in the National Safety Council upon application. In order to clarify Council records, those schools subscribing to SAFETY EDUCATION which desire membership status are requested to designate the individual who will represent the school as a member of the Council. That person must indicate to the Council his desire to represent the school's membership status. He or she will, upon applying with the application at right, receive a membership card in the National Safety Council.

Individual subscribers with school affiliation who desire to be recorded as members of the National Safety Council are requested to so indicate.

Effective as of July, 1959, only those who have complied with this request will be carried as members on National Safety Council records. The form below is to be used for this affiliation. *Fill it out and mail it to the School and College Division, National Safety Council, 425 No. Michigan Ave., Chicago 11, Illinois.*

School and College Division
National Safety Council
425 No. Michigan Ave.
Chicago 11, Ill.

I desire to exercise my privileges as a member of the National Safety Council. Please send the membership card to me.

Name_____

Title_____

Street Address_____

City and State_____

The subscription is in the name of

_____

(School or Individual)

Safety in the Auto Shop

safety education data sheet no. 57 revised

The Problem

1. Numerous attempts have been made to determine which of the school shops are the more hazardous. Generally speaking, the automobile mechanics shop ranks third in frequency of accidents. It is exceeded by the wood shop and the machine shop.

However, school shop accident statistics are based on frequency alone. Both the wood shop and the machine shop have considerably higher enrollments. So if exposure were taken into account, the accident rate of the auto shop would not be very favorable.

Principal hazards and injuries in the auto shop are: flammable materials, tire blow-out, bruised and cut fingers, acid burns, strains and hernia, falls and eye injuries.

2. There is little lifting required in the modern auto shop. Most of it is done with hoists, jacks and other lifting devices. In the use of such equipment, know and follow the safe practices involved. If lifting is required, lift with the legs—not the back—and get help for heavy and/or bulky objects.

General

3. One school has designated all shops as "100 per cent eye protection areas," meaning that everyone who uses the shop must wear eye protection equipment. Wear safety goggles on any job where the eyes are endangered, such as when sand-blasting spark plugs, grinding or chipping, using compressed air, working underneath cars, operating power machinery, performing abrasive disk or drum operations. Chemical or splash-proof goggles and a face shield should be worn during battery charging operations or when boiling out or testing radiators for leaks.

4. Sparks near an automobile storage battery create a hazard and can cause an accident. The accumulation of hydrogen in the top of the cell during a charge is very explosive. Do not test a battery by flashing the terminals with a piece of wire.

5. Use only extension cords and sockets that are in good condition. Portable light bulbs should be protected by a rubber- or neoprene-covered steel guard. Ground all portable lights with a third wire. And do not place cords or wires where they may become a tripping hazard. *Don't use any portable electric tools unless they are electrically grounded with a third wire. Be sure* the extension cables on portable electric tools are in good condition.

6. Do not attempt the use of any power tools or equipment in the auto shop until the proper and safe use has been fully explained by your instructor. Always use the proper tool for the job. Be sure transmission guards and point

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NATIONAL SAFETY COUNCIL
425 N. MICHIGAN AVE., CHICAGO 11, ILL.
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of operation guards are in place before using power machinery. Do not use defective tools. Mushroomed chisels and drift pins, hammers with broken handles, defective screw drivers, spread wrenches and greasy tools can all be the cause of serious accidents. Keep all tools clean and free from grease.

7. Never engage in horseplay of any kind in the auto shop. This includes running, scuffling, throwing tools or materials.

8. Never use compressed air except for the purpose for which it is intended. Horseplay with compressed air equipment or dusting off clothing or work benches with compressed air is extremely dangerous. Flying particles of metal or glass may be blown into the eyes or the skin. Also, compressed air blown into the skin or body openings can cause serious injury and even death.

9. Repair pits are generally considered impractical since they are difficult to work in and offer the opportunity for falls and the accumulation of toxic and flammable vapors.

10. An approved hoist should be used for work underneath a car. The hoist should be a definite work station in auto mechanics.

11. Vehicles jacked up or hung upon chain hoists should always be blocked up with pyramid jacks or with substantial wood blocking which has been carefully inspected.

12. Never crawl or work under a car that is not blocked up. This precaution should be followed even for inspection purposes.

If the school shop is regularly teaching front end alignment and adjustment, the front end pit with proper alignment equipment should be provided and used.

13. When working under cars, these precautions should be followed:

a. Use a creeper.

b. Keep legs clear of passageways.

c. Car doors should be closed.

d. Tools and equipment should not be placed on the car above the worker.

e. Other persons should not be working on top of the car.

f. Eyes should be protected with goggles or face shields.

14. Do not leave creepers, tools or other equipment where anyone can step on or trip over them.

15. Burns may result from working on a car that has not cooled off. Most frequently these are caused by coming in contact with the manifold, exhaust pipe or radiator liquid.

16. Engines should not be operated except under the immediate supervision of the instructor and then *only* if the shop is equipped for removing combustion fumes.

17. When starting an engine, *don't* pour gasoline in carburetor throat. Before starting an engine that has been overhauled, some oil should have been placed on the cylinder walls and on the bearings. Make sure there is oil in the crank case.

18. Before starting the engine, make sure the car is out of gear. On cars with automatic transmissions, make sure the hand lever is in neutral position when the motor is running.

19. Be especially cautious around moving parts, such as flywheel, fan blades, and belt, gears and generator pulley. Keep sleeves rolled up when working with *any* moving machinery. Don't oil engine while it is running, and do not attempt to wipe moving parts of the engine. Keep hands out of door jambs.

20. It should not be necessary to syphon gasoline from the tank. However, if this is done, do not use the mouth to start the syphoning. Gasoline often contains poisonous tetraethyl lead.

21. Handle brake fluid carefully so that it does not splash in the eyes. The use of a syringe is recommended.

22. To avoid burns from accidental short-circuits and to prevent accidental engagement of the starting motor, be sure to disconnect grounded battery cable and insulate connection before working on the power plant of the car.

23. Never consider a job complete until a

check has been made to make sure all lock washers, cotter pins or other locking devices are in place. Be sure cotter pin ends are not protruding to cause scratches.

24. Wear leather gloves when removing jagged pieces of glass from car windows, windshields and lenses. To remove a light bulb, be sure the light switch is in off position, break off the glass splinters and use long-nose pliers.

25. Wipe up at once any spilled oil and grease or other liquids. They are slipping hazards. Use oil-absorbent materials on the oily spots.

26. Foot injuries occur in the auto shop. Adequate foot protection should be provided or precautionary measures taken. Safety shoes offer the best protection.

27. Report all conditions that seem dangerous to the instructor and report any injury immediately. Have all injuries treated *at once*.

Fire

28. Never smoke, use open flames or strike sparks in a room where flammable liquids are used or stored.

29. Keep only working quantities of gasoline on hand. Use only approved safety cans for such storage and be sure all containers are properly labeled. Keep containers tightly closed. Store all flammable liquids in a fireproof room which has been approved by the fire marshal.

30. No engine should be operated if there is any gasoline leak from the carburetor, fuel pump or gasoline lines.

31. Avoid placing live wires near fuel lines, carburetor or gas tank. Before starting the engine, make certain that the engine is properly timed (to avoid backfire), that there are no short circuits, that all electrical connections are in order, and that there are no leaks in tank or fuel line connections.

32. Sparks from static electricity are an ever-present hazard when you pour or pump gasoline from one container to another. To preclude the possibility of such sparks during filling operations, a wire bond should be provided between the storage container and the container being filled. In addition, it is advisable to have the bonding wire or the receiving container grounded.

33. The practice of using gasoline for cleaning parts should be prohibited. Grease, oil and dirt may be removed from metal parts with non-flammable solutions and high flash point solvents such as trichloroethylene and perchloroethylene. The latter solvents must be used in special degreasing tanks, with adequate ventilating facilities.

34. Do not wash hands and arms in gasoline. Dermatitis may result, since gasoline takes the natural oil out of the skin. Many soaps are available which will remove greasy dirt.

35. Change any oil- or gasoline-soaked clothes immediately. A spark, a hot exhaust manifold or an open flame can easily ignite such clothing.

36. Dispose of oil- or gasoline-soaked rags, waste, etc., and other debris in self-closing air-tight metal cans provided for this purpose. Empty the cans and burn the contents in a suitable place each day.

37. The use of gasoline to remove oil and grease from the floor should be prohibited. Spilled gasoline is a fire hazard and should be removed immediately.

38. Learn the location and use of various fire extinguishers for each type of fire.

Lifting Devices

39. Fasten chain hoists securely and don't overload chain slings. Inspect chain hoist before use; test by lifting only a short distance.

In order to teach engine tune up under load safely, the use of a dynamometer and engine test equipment is recommended.

40. Don't use a jack if there is any doubt about its safe operating conditions.

41. Block wheels before jacking up the car and when two wheels are off the floor, block the other wheels.

42. Never lift or lower (jack up) a car if someone is working underneath it.

43. Turn or remove jack handles so that no one can trip over them.

44. Don't lean over a jack handle or handle socket under load.

45. Operate hydraulic, pneumatic or electric power car lifts strictly according to manufacturer's instructions, and do not raise weights beyond the rated capacity of the lift. The instructor should always inspect the contact of the car with the lift and be in attendance during the lifting operation.

Safety in the Auto Shop *(Continued from preceding page)*

46. Before a car is raised on a drive-on type lift, set brakes; block the wheels; and check to see that the car is not in gear.

47. Never rock the lift unless it is designed for that purpose.

48. Use all safety devices provided on a lift and see that everyone is in the clear before lowering the lift.

Grease Racks

49. Keep the floor clean of oil and grease to prevent slipping.

50. Keep hands away from sharp or rough edges on vehicle.

51. Don't put hands in front of grease gun nozzle when handle is pulled. High pressure grease guns can force grease under the skin.

52. Screw or clamp tops of grease cylinders in place with great care. Serious injuries can be caused by blown-off covers.

53. Be careful not to inhale sprayed or atomized oil. Stand clear until the oil settles; because of its heaviness, oil settles rapidly. Do not direct oil spray toward other workers.

54. Exercise caution when rocking a car to make grease penetrate frozen bearings or stiff springs. Do not use a lifting or pushing motion.

Welding

55. When arc welding, wear clothing and welding helmet that completely protects body and eyes from rays of arc, hot metal and sparks.

56. Wear protective colored glass welder's goggles and helmet approved by the American Standard Safety code for gas and electric welding.

57. Welding operations (see Data Sheet No. 56, *Welding and Cutting Safely)* should not be conducted in the same room with spray painting operations or where gasoline, kerosene or other flammable materials are exposed.

58. Surround electric arc welding operations with a shield at least six feet high. Persons working nearby, not protected by shields, should wear protective goggles.

59. Before welding or brazing a leaky gasoline tank, (1) remove it from the car; (2) steam it until all the gasoline has been evaporated (experts recommend a minimum of two hours steaming, many advise four hours); (3) fill the tank with an inert gas, carbon dioxide is acceptable, or fill it almost to the rupture with water, providing a vent for the escaping steam. Get the instructor's approval after this has been done and before starting the weld.

60. Always check with the instructor before welding on a car frame near a gas tank, carburetor and gas lines. Since there are no set rules for welding operations in this area, the instructor will issue safety rules consistent with existing conditions.

61. Never use oil *in even the smallest quantities on oxy-acetylene equipment.* Oil in the presence of oxygen may ignite spontaneously. Don't use an oxy-acetylene set near oil or grease on motor vehicle parts, and clean hands of oil or grease before welding.

62. Always, during welding and cutting operations, have a fire extinguisher standing by.

Spray Painting

63. Spray painting should never be conducted within 30 feet of persons smoking or other ignition sources, such as welding or brazing operations. Spraying should be done in a spray booth with exhaust system.

64. Anyone spray painting must wear an approved-type respirator.

65. Do not use a sprayer unless the exhaust system is in operation.

66. To avoid possible sparks, use a non-ferrous scraper for removing dried paint from sides, floor and roof of spray booth.

67. Never point spray gun at fellow-workers.

68. When hand rubbing spray paint coats, wear synthetic rubber gloves and hand pads if kerosene is used as a lubricant. Hand pads are sufficient when water is used as a lubricant.

69. Do not clean hands with spray paint thinners.

Battery Handling

70. Get help when lifting large batteries. Don't hold battery in your arms. Use battery strap or carrier. Always hold battery upright so there is no danger of spilling acid.

71. Disconnect ground cable first when removing battery from car and connect ground cable last when installing battery. Don't install a battery while it's gassing.

72. Don't short circuit a battery to test it, and, if there is a short circuit, do not touch shorted wire with bare hands. Tools or other metal should not be placed on top of a battery. A short circuit and possibly a fire may result.

Battery Charging

73. Never smoke or use open flame in a battery charging room.

74. Since the danger of acid burns is the principal hazard in battery charging operations, wear proper protective clothing. Chemical goggles, rubber aprons, gloves and boots are the best protection. Wear the gloves, boots and apron during actual refilling operations. Wear goggles whenever working around batteries. When testing batteries, keep eyes away from vents.

75. Follow closely manufacturer's recommendations for charging rates of various size batteries. Take all possible precautions to avoid short circuits while batteries are being charged. A short circuit could be the cause of serious burns or the explosion of accumulated hydrogen.

Tire Operations

76. Be sure pressure gauges are working properly and never face the tire which is being inflated. Excessive pressure or structural defects may cause a tire to explode, causing serious injury.

77. Don't lift heavy tires. Get help or use mechanical lifting devices.

78. Keep rubber cement and flammable solvents for patching tubes or filling tire cuts in safety cans.

79. Wear goggles when using power-driven rasps or scrapers for tires or tubes.

Selected Information Sources

80. *Automobile Mechanics for Vocational High Schools—Syllabus.* 187 pp. Brooklyn, N. Y.: Board of Education of the City of New York. 1948-49 series.

81. *Garage and Repair Shop Safety. Fleet Safety Manual Part VII.* 12 pp. Illustrated. Chicago, Ill.: National Safety Council.

82. *Garages and Repair Shops. Industrial Safety Series Pamphlet No. D-6.* 14 pp. Illustrated. Chicago, Ill.: National Safety Council.

83. *Jack Up Safety.* C. M. Hewitt. 3 pp. Illustrated. SAFETY EDUCATION reprint. Chicago, Ill.: School and College Division, National Safety Council.

84. *Safety Instruction Cards.* Chicago, Ill.: National Safety Council.

No. 226—*Flammable Liquids*
No. 82 —*Garage Mechanics*
No. 93 —*Lifting with Jacks*
No. 227—*Spray Coating*

85. *School Shop Safety Manual.* 240 pp. Brooklyn, N. Y.: Board of Education of the City of New York. 1948.

86. *Shop Safety Education.* The State Education Department. 319 pp. Illustrated. Albany, N. Y.: The University of the State of New York. 1949.

87. *Handbook of Safety Regulations.* Detroit Public Schools. Revised 1956. Detroit, Mich.: Board of Education of the City of Detroit.

This data sheet was prepared for the National Safety Council by A. D. Althouse, Assistant Director, Vocational Education, Division of Instruction, Detroit Public Schools.

Safety Education Data Sheets available are:

(1) Bicycles
(2) Matches
(3) Firearms, Rev.
(4) Toys and Play Equipment
(5) Falls
(6) Cutting Implements
(7) Lifting, Carrying and Lowering
(8) Poisonous Plants
(9) Electric Equipment
(10) Pedestrian Safety
(11) School Buses—Administrative Problems (Rev.)
(12) Flammable Liquids in the Home
(13) Passenger Safety in Public Carriers
(14) Chemicals
(15) Hand Tools
(16) Nonelectric Household Equipment
(17) Sidewalk Vehicles
(18) Camping
(19) Alcohol and Traffic Accidents
(20) Cooking and Illuminating Gas
(21) Solid and Liquid Poisons
(22) Safety in the Gymnasium (Rev.)
(23) Laboratory Glassware
(24) Places of Public Assembly
(25) Fireworks and Blasting Caps
(26) Domestic Animals
(27) Swimming
(28) Small Craft
(29) Play Areas
(30) Winter Driving
(31) Night Driving
(32) Winter Sports
(33) Traffic Control Devices
(34) Safe Conduct in Electrical Storms
(35) Poisonous Reptiles
(36) Motor-Driven Cycles
(37) Animals in the Classroom
(38) Railroad Trespassing
(39) Bad Weather: Hazards, Precautions, Results
(40) School Parties
(41) Home Workshops
(42) Horseback Riding
(43) Hiking and Climbing
(44) Hook and Line Fishing
(45) Summer Jobs—Farm
(46) Safety in the Wood Shop
(47) School Fires
(48) Unauthorized Play Spaces
(49) Bathroom Hazards
(50) Safety in the General Metals Shop
(51) Safety in Pupil Excursions
(52) Highway Driving, Rules, Precautions
(53) Safety in the Machine Shop (Rev.)
(54) Summer Jobs: laborers, home yard, service-stations
(55) Motor-Vehicle SPEED
(56) Welding and Cutting Safely
(57) Safety in the Auto Shop (Rev.)
(58) Winter Walking
(59) Safety in the High School Chemistry Laboratory
(60) Safety in the Farm Mechanics Shop
(61) Floors in the Home
(62) Hazards of Discarded Iceboxes and Refrigerators
(63) School Bus Safety: Educating Pupil Passengers
(64) Safety in the Graphic Arts Shop
(65) Safety in Part-Time Jobs: Food Handling
(66) Baby Sitting
(67) School Dramatic Productions
(68) Safety in "Do-It-Yourself"
(69) Playground Apparatus
(70) Safety with Kites and Model Airplanes
(71) Safety in Sports: Baseball
(72) Safety in Sports: Football
(73) School Bus Safety: Operating Practices
(74) Playground Surfacing
(75) Safety in Sports: General Practices
(76) Safety in Bad Weather Conditions
(77) Safety in Sports: Basketball
(78) Safety for Amateur Electricians
(79) Coordinating Safety in Industrial and Vocational Education Programs
(80) Counselors and Helpers in Summer Camps
(81) Gun Clubs: Their Organization and Activities
(82) Office Safety
(83) Safety in the Sheet Metal Shop
(84) Skiing Safety
(85) Safety in the School Lunch Room
(86) Cigarette Fire Hazards
(87) Safety in the Electrical Shop

Data sheets from SAFETY EDUCATION are available for a small fee from the National Safety Council, 425 No. Michigan Ave., Chicago 11, Ill. Bound volumes of the data sheets may be purchased from the Council at $3.89 each for one to nine copies.

Should the Minim

Educators and teen-agers join in giving their opinions on a question which is much in the mind of the public in these days of rising traffic accident rates.

OUR CONTRIBUTORS: PAGE 24.

JOSEPH M. NELSON:

TO legislate an answer to an educational problem is to provide an artificial solution. Such treatment might well be effective in regulating the symptoms, but the causes must be controlled before a real cure can be effected.

We cannot deny that a grave social problem surrounds teen-agers and their use of automobiles. The ownership of, or unrestricted access to, an automobile has become a badge of prestige. Deterioration of family ties, serious decline in academic performance, decreased participation in athletics and other school activities and increased drop-outs have resulted as young drivers spend more and more time in the operation and support of automobiles. But to assign major responsibility for this situation to teen-agers alone is eminently unfair.

Society must accept the blame for allowing a distorted set of values based on the automobile to be upheld as normal and desirable. If lasting improvement is to be made in the problem of teen-age use of cars, society must approach the solution through cooperative effort.

Parents of teen-agers can exercise the most effective control on young drivers. Combined parental effort in restricting the ownership and use of automobiles by their children would all but eliminate the problem. Parents must develop the courage to refuse the demands of their children for liberties inimical to the welfare of society in general, teen-agers in particular.

Since schools play a major role in the development of values and standards, they—and other educational agencies—have a large stake in the problem. Effort in the direction of inculcating values which are in harmony with the *real* needs of society would go far in restoring balance. Practical control measures such as restricting student use of cars in school environs, including transportation to and from school where laws of the state permit such control by school authorities, would also help depopularize the automobile.

Enforcement must be applied to teen-age drivers as it is applied to adults. Police should be no more zealous in regulating youthful drivers than in controlling adults. Action of the courts involving young drivers should be no less strict than in the case of adults. It is the nature of an improper driving act rather than the age of the driver which determines its inherent danger. A single enforcement standard for *all* drivers is therefore essential. Only where juvenile codes unrealistically preclude the assessment of equal penalties to young drivers should consideration be given to denying the driving privilege to teen-agers.

Reorientation of young drivers to reduce the present social problem and improve their safety record will require more than legislation prohibiting youth from driving. This is not to say that the entire approach should be outside the legislative framework. Laws establishing a probationary period of two or three years during which *every* new driver would prove himself, before being granted full driving privileges would emphasize that a driver's license is not an automatic right but a privilege to be *earned*. Driver education support laws are needed in all states so that adequate instruction, aimed at developing good traffic citizens, can be provided by our high schools.

BOB R. STERNBERG:

Any policy consideration in the fields of driver licensing, enforcement, driver education or traffic engineering must be tested by two basic considerations:

- *Will the proposed change make an improvement in the total traffic problem?*
- *What are the implications of the proposed change to related fields directly interested in the traffic problem?* What are the implications of raising the minimum licensing age for law enforcement, juvenile crime and driver education?

Since the question does not indicate a specific age, let's assume the minimum licensing age would be raised to 18 years. (The Uniform Vehicle Code now recommends a minimum age of 16 years.)

If the minimum age were raised to 18 years, the law enforcement problem would be increased and driver education hindered in doing its share to reduce our traffic problem.

...um Driver Licensing Age Be Raised?

forum-in-print

Withholding licenses from 16- and 17-year-olds would bring a sharp increase, for one thing, in motor scooter riding. It would greatly increase illegal driving of cars and tempt teenagers to steal other autos when denied the use of the family car.

Raising the minimum age to 18 would greatly reduce the effectiveness of driver education in secondary schools. Many high school graduates and early school leavers would be denied the opportunity of taking a course in driver education if the minimum age were raised because *first*, the average high school graduate is 17½ years old, and *second*, the number of early school leavers increases substantially after age 16 since most states require school attendance only up to 16 years of age.

There is much to be said for maintaining the minimum licensing age and the compulsory school attendance age at an identical figure. Under such conditions, practically all youth are available in school for a course in driver education. Raising the minimum age to 18 merely postpones the problem of improving the youthful driver. Regardless of the law, boys and girls who are over 16 are going to learn how to drive. They will use every method except the correct one — an improved driver education course taught by a competent teacher—if they are not allowed to do it legally.

Would raising the minimum age materially reduce our traffic problem? Definitely, *no*. The 16- and 17-year-olds taken off the road by such action are *not* the primary traffic violators. Records show that youth in their late teens and early twenties are the ones who "load" the record for the 16- to 25-year age group.

Let's keep the 16-year-olds on the road legally and help them to be better drivers through education. Let's not create a situation in which their keen desire to drive increases the problems of delinquency and crime without a significant reduction in traffic accidents and deaths.

HARRY D. STAHL:

The youth in a rural area is vitally needed to assist in production of one of our basic requirements of existence—food. For this reason, he is conscious of safety and mechanical requirements in machine operations at an early age. He usually reaches maturity sooner, also, because of such responsibilities and experiences.

When he is 16 years old, he is given the opportunity to take driver education in high school. Through proper guidance in driver education, he learns to associate psychology of attitudes with the knowledge he had before, also learns the basic mechanics of the auto and driving laws.

(Continued on next page)

Should the Minimum Driver Licensing Age Be Raised?

(Continued from preceding page)

The number of licensed operators has reached more than 77,869,000, and the teen-age group comprises nearly 10 million of this figure. In New York State last year, there were 285,865 drivers involved in accidents, 3,995 under 18 years of age and 15,637 between 18 and 20. Only 14 per cent were teen-agers, while 43 per cent of the accidents involved the 30 to 39 age group.

My driver education students think that punishment to teen-age violators should be more severe. They feel that the bad name given to teen-age drivers is caused only by a few, and that these few could be weeded out through effective enforcement.

Many feel that teen-age reflexes and coordination should not be wasted by years of waiting, that these abilities should be trained in driving experience. A surprising majority felt that a course in driver education should be made mandatory before obtaining a driver's license.

Here's what one teen-ager said: "If older people would stop being so critical and try to help us, we would all be further ahead."

OUR CONTRIBUTORS:

Joseph M. Nelson, Supervisor of Driver Education, Oregon State Department of Education, Salem, Ore.; Bob R. Sternberg, Consultant in Driver Education, Michigan Department of Public Instruction, Lansing, Michigan; Harry D. Stahl, Driver Education Instructor, De Ruyter High School, De Ruyter, New York; Pat Powers, student, P. K. Yonge Laboratory School, Gainesville, Florida; Norma Closson and Robert Gary Ayers, students, De Ruyter High School, De Ruyter, New York.

PAT POWERS:

Today we see a tremendous trend toward psychology and social adjustment. With it has come a condemnation of teen-agers with all of their problems and rebellious instincts. Many problems have arisen from these conflicts, and not the least of them is the question of whether the minimum age required to obtain a driver's license should be raised. I definitely feel that this age should not be raised.

Every citizen is, or should be, interested in the prevention and reduction of accidents. One important factor in avoiding accidents is physical and mental acuteness. Naturally, a person who can see, hear and reason well is less likely to cause an accident than a person who is deficient in this respect. Teen-agers have sharper eyes, more acute hearing and more flexible minds than do the older generation.

To do a thing well a person must be interested in what he is doing. Teen-agers have many reasons for their interest in learning to drive. They need to drive to go out on dates; it affords an opportunity to experience independence, which is so important to a teen-ager. Also, there are meetings and events they attend that conflict with the schedules of their parents, and this causes a transportation problem. In addition, it becomes an asset toward social acceptance to be a *good* driver. There is keen competition for the compliment.

NORMA CLOSSON:

I do not feel that the age should be raised for receiving a driver's license, especially if one takes driver education. If a boy or girl gets his license and later is reckless, he should have to wait until he reaches a certain age before he gets his license back. If he hasn't taken driver education, he could be made to take that and pass it before getting his license back.

One who lives on a farm needs a license when he is young so that he can assist with farm work—especially if the farm is scattered so that you have to travel the roads to milk and do other farm work.

If the age is raised, I think older drivers should have to take tests every now and then, for they are not perfect drivers by far.

ROBERT GARY AYERS:

I see no logical reason for raising the minimum requirement to drive. If the minimum age were raised to 30 or 40 years, the number of accidents would not decrease. You would have the same people driving. And these people would have no more experience driving legally than when they were in their teens if they aren't allowed to touch the wheel of a car.

The most dangerous driver on the road is the immature driver who wants his own way or feels he has to show off or force his way around. Many drivers are ill-informed people who have had no form of driver education. Others are thoughtless, careless, nervous or self-centered people. Driver education may help a lot of these people along with more helpful and educational information.

In some of these cases, time won't help save lives. Are people really more mature drivers when they are older than when they were teen-agers?●

the BULLETIN BOARD

new name for campus safety group . . .

Change in title from Campus Safety Committee, and the holding of joint sessions with The American College Health Association in Los Angeles, were two of the highlights of the Fifth National Conference on Campus Safety, held at the California Institute of Technology from March 24 to 26.

Michigan State University School of Police Administration director A. F. Brandstatter, chairman of the Campus Safety Association, new title for the group, said the new name "more adequately describes the size and scope of the organization, and gives greater prestige with colleges."

Conference arrangements, made by Caltech safety engineer Charles W. Easley, with the National Safety Council as co-sponsor, included presentations by college and organizational leaders in campus safety. Subjects ranged from safety in swimming pool operations to laboratory safety, student vehicle use, new safety equipment, campus health and safety problems and other subjects. Complete proceedings are available from the Council.

The Conference was attended by more than 80 representatives from 49 colleges and numerous organizations. One representative from the University of Alaska was given an award for having traveled the greatest distance—4,000 miles.

The 1959 Conference will be held at Michigan State University's Kellogg Center April 27 to 29.

Cincinnati driver education TV course to be made a national project . . .

When the Cincinnati public schools televised their driver education classes last year for classrooms throughout the city, nationwide interest was tremendous, and many cities wrote to Cincinnati for information on the results obtained.

Because of the great number of inquiries, the National Commission on Safety Education of the National Education Association, and the National Television and Radio Center, a division of the Ford Foundation, became interested in re-making the kinescopes for national use. The two organizations appointed an advisory committee which has decided the form and content of 30 half-hour kinescopes on driver education.

The kinescopes are being produced by the Cincinnati Public Schools and WCET, the educational television station in Cincinnati, under the supervision of the Center and the Commission. When completed, the series will be made available first to educational television

(Continued on next page)

IMPORTANT NOTICE!

EVERY month the mail to the National Safety Council is filled with thousands of requests from school children for general safety material. The Council has been happy to fill these requests, with the conviction that such cooperation had a real part in emphasizing the importance of safety to each young correspondent.

Now, however, the volume of requests has reached such a point that we are no longer able to handle them. Therefore, we urge teachers to discourage their pupils from writing to the National Safety Council for safety material.

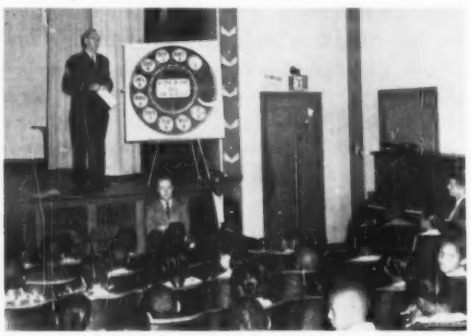
Instead, we suggest your pupils write to their local or state safety councils for information relating to the various phases of safety. This will not only facilitate service to them, but it will provide them with an opportunity to learn about the resources of their own communities and states which are actively engaged in the fight against accidents.

stations throughout the country for adult viewing; later to the schools for direct teaching of driver education. The Cincinnati public schools, however, will use the films for direct teaching beginning this month.

patrols trained at encampment . . .

A week of swimming, hiking, fun and safety learnings was the experience of 201 safety patrols in Fulton County, Atlanta, Georgia, this past summer.

They were attending the Safety Patrol Encampment, the Fulton County Board of Education's method of training new safety patrols in the performance of their duties while at the same time impressing them with their special privilege in becoming guardians of their classmates' safety.



To teach children how to call the fire department in a fire emergency, and what information they should be able to give the operator, the Evanston, Illinois, Fire Department puts on demonstrations in public and primary school assembly programs. The telephone dial was procured from the Bell Telephone Company.

The 201 boys and girls, graduates of the sixth grade and representing 37 of Fulton County's 40 schools, learned and played, mixing good fun and camping experience with important lessons on "The Importance of the Safety Patrol," "The Place of the Patrol in School Safety," "Duties of the Patrol," "Bicycle Safety," "Pedestrian Safety," and "First Aid." Patrol instruction periods began at 9:15 a.m. every day of the five-day Encampment and lasted until 11 a.m. The rest of the day was given over to camping fun.

"We feel that our Safety Patrol Encampment not only adds to the proficiency of our patrol but also is a great stimulant to our total safety program," says John G. Lewis, coordinator of safety education for the Fulton County Board of Education. This was the third annual Encampment.

two teachers save 50 . . .

A teacher who "sensed something would happen" when she saw the sky suddenly turn black, and another who also sensed danger, were credited with saving the lives of 50 children in LaCoste, Texas, school last May.

The teachers, when they saw the sky, immediately herded their children into a lounge of the school, just before a raging tornado ripped through the roof of the building dumping bricks and steel girders on the desks. By a "miracle," the lounge where the children and teachers huddled was saved, although the teachers, Mrs. Dorothy Marthis and Mrs. Rose Wolverton, were amazed to look up and see the roof of the lounge had been partly torn off when the tornado passed.

Citation Awards given for outstanding work . . .

Noteworthy work in school safety education has earned National Safety Council Citation Awards for two public-spirited people—W. F. Leonard of Dallas, Texas, and Mrs. Arvil L. Stark, Salt Lake City, Utah.

Leonard, who is safety supervisor for the Southland Corporation in Dallas, has been called a "one-man safety crusade." Prominent in his safety work are the hundreds of talks on traffic safety he has given at schools and young people's meetings throughout Texas.

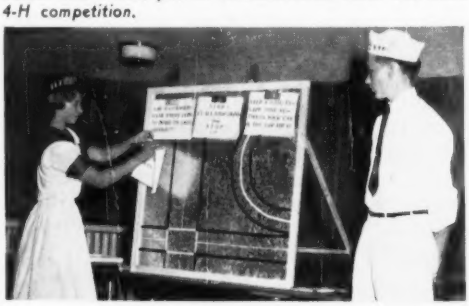
Mrs. Stark, safety chairman for the Utah Congress of Parents and Teachers, successfully organized the state's first Teen-Age Traffic Safety Conference, now an annual event, and did an outstanding job of getting driver education into Utah schools. During her P-TA chairmanship, Mrs. Stark also raised the number of schools in Utah completing requirements for the National Safety Council's Honor Roll program, from two to 50.

Yost goes to Wisconsin . . .

Charles P. Yost, Ph.D., formerly associate professor and supervisor of safety education at West Virginia University's School of Physical Education, is the newly appointed director of

(Continued on page 35)

"Is Your Date A Menace?" was the title of a traffic safety demonstration by 4-Hers in San Joaquin County, California. Below: two 4-Hers put on demonstration, which won state 4-H competition.



SEPTEMBER 1958

LOWER ELEMENTARY SAFETY LESSON

S-1377-A

Back to School

Summer is over.
Jack and Jane are back at school.
They had fun last summer.
They will have fun at school.
They also want to be safe.

Miss Jones asked, "What can we do to be safe at school?"
The children all said, "First we should remember what we learned last year."
So Miss Jones put these questions on the board.

Getting to School

Do we know the safe route to school?
Do we remember how to cross streets safely?
Do we know where to load and unload from cars?
Then they decided to draw some pictures of these things.
Can you draw pictures showing how to get safely to school?

What to Remember at School

Do we know how to walk through the halls?
Do we know how to walk safely up and down stairs?
Do we know how to use the drinking fountains safely?
(Draw some more pictures about these things)

Published by the National Safety Council, 425 No. Michigan Ave., Chicago 11, Ill. Price: three cents each for ten to 99 copies; minimum order ten copies. Lower prices for larger quantities. For information, write the Council, Membership Department.

Prepared by James Mann, Principal, Hubbard Woods School, Winnetka, Illinois, former general chairman, Elementary School Section, National Safety Council.

What's New at School?

Miss Jones's children are playing a game.
It is called, "What's New at School?"
They made a list of new things they saw.
Here is what they saw.

A new swing on the playground.
A new traffic light near school.
A different entrance from last year.
Tools for the room.

Next they talked about each new thing. They made some rules for using them.

What Is New at Your School This Year?

Make a list of rules for using each new thing.
It is a good idea to talk to the person in charge.
Ask him what to do about each new thing.
Then make a list of rules.

Do you have some new pupils in your room? Would you like to show them your school? Then you could tell them the safety rules of your school.

UPPER ELEMENTARY

SAFETY LESSON

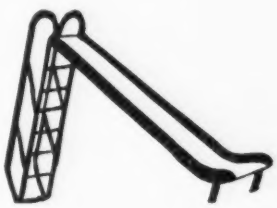
S-1377-A

Back to School

"Hi, John! Hi, Jane! Did you have a good vacation? Are you glad to be back and see all your friends? Aren't there a lot of children? Some new ones, too. We'd better tell them about our school safety rules."

Jack and John and Jane did get busy. First they listed all the safety rules they could remember. Then they made a test for these rules for everyone to answer. Here are their questions. How many could you answer correctly for your school?

1. Do you have a safe route to school for yourself?
2. What are the rules for safety on the school bus?
3. What are the bicycle riding rules?
4. What precautions should we take in the halls?
5. What are the "danger spots" on the playground?
6. What should we do when the fire alarm sounds?



Write answers for these or similar questions for your school. Compare and discuss your answers in the group. Your teacher will help you with the answers.

What's New at School This Year?

Do you have a new piece of playground apparatus at school this year? Are there some new tools for the shop? A new entrance plan?

Make a list of all new things or changes at school. Choose committees to talk with the principal, the custodian, or whoever is in charge. Find out what safety rules are needed for each. List these on your bulletin boards.

Are there some new boys and girls in your school? What should they be told about the school safety rules? Perhaps guides could show them around the school and point out any hazards.

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Prepared by James Mann, Principal, Hubbard Woods School, Winnetka, Illinois, past general chairman, Elementary School Section, National Safety Council.

For Bicycle Riders

Is your bicycle 100 per cent safe? Take this test and see how you stand.

If your bike has:	*Give yourself:*
1. Good brakes	20 points
2. A horn or bell that works	20 points
3. A light that works	20 points
4. A reflector 1½ inches in diameter	20 points
5. Tight seat and handlebars	10 points
6. Solid front and rear fenders	5 points
7. No loose spokes on wheels	5 points
	Total 100 points

Bonus points for:

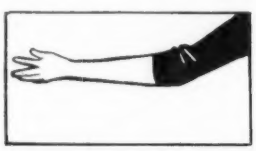
8. Carrier on back or basket for heavy loads	10 points
9. Reflector tape on sides for added protection	10 points

Do you know the safe riding rules? Try this test.

Circle the correct answer.

1. Ride. . . . one on a bike—two on a bike.
2. Ride. . . . in pairs—single file.
3. Ride. . . . at the right-hand curb—at the left-hand curb.
4. Walk—ride. . . . across heavily traveled intersections.
5. Ride. . . . in a straight line—weaving back and forth.
6. Using hand signals. Under the picture that illustrates each, write *left-turn, right-turn, stop.*

a. _____



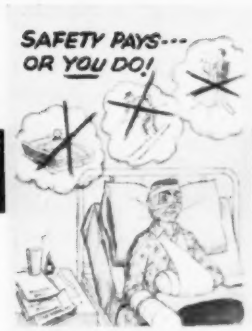
b. _____

c. _____

Answers to Riding Test: (1) one on a bike; (2) single file; (3) at right-hand curb; (4) walk; (5) in a straight line; (6) (a) right-turn; (b) left-turn; (c) stop.

SEPTEMBER 1958

JUNIOR HIGH SCHOOL SAFETY LESSON



S-1378-A

Safety Pays

Two Ways of "Paying"

Every time there is an accident, not one but *many* people pay—and in *several* ways.

One form of payment is money. For example, in an automobile accident, the following items will necessitate payment:

Cost of tow truck to take away automobile;
Cost of auto repairs;
Cost of ambulance to carry injured to hospital;
Cost of hospital;
Cost of doctors;
Cost of medicines;
Cost of possible lawsuit;
Cost of substitute transportation while your car is being fixed;
Cost of income lost while recovering.

Another means of paying is even worse. The pain and possible permanent injury of the victims; the sorrow of the relatives; the remorse of those causing the accident; and the worry of the entire accident will total a huge lifetime payment—for a few seconds of carelessness.

There are other "hidden" costs, too. The more accidents a community has, the more the police and fire departments must add to their personnel and equipment in order to take care of the accidents. This results in more taxes. Also, when accidents increase, insurance rates must increase.

In 1957, the total estimated cost of accidents totaled billions of dollars!

Yes, Safety Pays—Or *You* Do!

Visualize the Problem

Since 1913, the National Safety Council has sought to solve the accident problem that causes so many deaths and injuries each year. As a nonprofit, public service organization, the Council has worked tirelessly to suggest better safety measures, and to give the American people the facts about accidents. One of the difficulties in making the American public understand the seriousness of the accident problem is in bringing the accident statistics "to life."

You can *see* the problem more clearly by completing the following sentences. Use library reference books—*World Almanac* and others—to find the information needed for numbers three and four.

1. In 1957, the number of people accidentally injured in the U. S. was 9,600,000. This total could be figured at the rate of one person every _____ seconds.

2. In 1957, the number of people accidentally killed in the U. S. was 95,000. This total could be figured at the rate of one person every _____ minutes.

3. If the following football stadiums—University of Illinois Memorial, Tulane, Yale, Rose Bowl, Orange Bowl, Cotton Bowl and Rubber Bowl—were filled to seating capacity, the total number of people would be _____ *less* than the total people killed and injured in accidents in 1957.

4. If the student enrollment for the 1957 spring term at New York University, University of Florida, Columbia University, Harvard University, Georgia Institute of Technology, University of Chicago, University of Oklahoma, University of Maine, and U.C.L.A. were totaled, the total would be _____ *less* than the total people killed and injured in the U. S. in 1957.

Answers: (1) three seconds; (2) six minutes; (3) 9,188,736; (4) 9,577,162.

Published by the National Safety Council, 425 No. Michigan Ave., Chicago 11, Ill. Price: three cents each for ten to 99 copies; minimum order ten copies. Lower prices for larger quantities. For information, write the Council, Membership Department.

Prepared by Dr. Vincent McGuire, Associate Professor, Secondary Education, University of Florida, Gainesville, Florida.

Cost of Accidents in 1957

The accidents in which deaths and injuries occurred, together with non-injury motor-vehicle and work accidents and fires, include the following costs:

Wages	$3,800,000,000
Medical fees and hospital expenses	950,000,000
Administrative and claim settlements	2,250,000,000
Property damage in motor vehicle accidents	1,850,000,000
Property destroyed by fire	1,023,000,000
Property destroyed or production lost	2,000,000,000
1. The total cost is	$11,873,000,000

2. Based on an approximate U. S. population of 170,333,000, the total accident cost for every man, woman and child is _____

Back the Attack! Last year, the National Safety Council succeeded in arousing the nation to "Back the Attack" on accidents. The results were so good that the Council is continuing the Back the Attack program this year.

How Does Safety Pay?

During this current year, your family has probably paid out actual dollars and cents for accidents that could have been prevented. Figure the entire class "accident cost" by having each student list the financial cost of accidents in his family. Listed below are some of the usual cost areas. Get your parents to help you by discussing the accident costs, reviewing the checkbook stubs, and counting the work days missed. Use the following form when discussing this problem with your parents.

Accident Costs—January 1, 1958, to September 1, 1958

Medical Costs

Doctor _____ Hospital _____

Special Nurses _____ Medicines _____

Ambulance _____ Miscellaneous _____

Sub Total _____

Equipment Costs

List such costs as: repairs for automobile, broken windows in home, repair of appliances, etc.

Sub Total _____

Loss of Work Days

Figure this by multiplying the days missed times the daily wage.

Sub Total _____

Miscellaneous

Figure any other expense that came as a result of accidents and list here.

Sub Total _____

Grand Total _____

Ask all members of the class to write the grand total on a small piece of paper and turn in to the class chairman. Add the totals on the board. This is what safety *would have paid* if safe practices had been followed.

S-1378-A

SEPTEMBER 1958

SENIOR HIGH SCHOOL SAFETY LESSON

Safety Pays—Or You Do!

Accidents Cost—Safety Pays

The boy in the picture above is not happy, as you can see. He's unhappy because he never realized how much an accident would cost—in terms of money, in terms of time and fun lost, and in terms of physical suffering. In order to get a clear picture of the "chain reaction" that results from one accident, think through the following hypothetical case.

Suppose one of you—a student with a brother and a sister, parents, an average home and a yearly family income of $5,000—had an accident. You were driving by yourself and, in a moment of carelessness, failed to make a curve. The family automobile, a 1957 model, hit a tree—bending the front axle, blowing both front tires, breaking the radiator, and cracking the headlights. You sustained a broken arm, gashed head and fractured rib. The accident happened two miles from home.

What's the Probable Cost?

What would be the estimated cost of the accident described above? Appoint a board recorder and a discussion leader. Discuss the various "money-cost" items that would be involved in such an accident and list them on the board. Items in this category would be: towing costs, ambulance costs, car repairs, hospital bills, and many more. After completing the list, try to estimate the cost of each item and figure the total cost.

Make another list entitled "personal cost" items such as: physical pain of victim, missing school and social affairs, worry of family and girl friend, and many more. These are "expenses" that can't be totaled—*but they take a long time to pay.*

Discuss the effect of an increase in accident rates on insurance rates. Also, how about increased taxes for increased fire and police facilities for increased accident rates?

All these expenses come to quite a total, don't they? And all for a moment's carelessness. What can be done to cut down on the accident toll?

Direct Expenses *Indirect Expenses* *Sorrow*

Back the Attack!

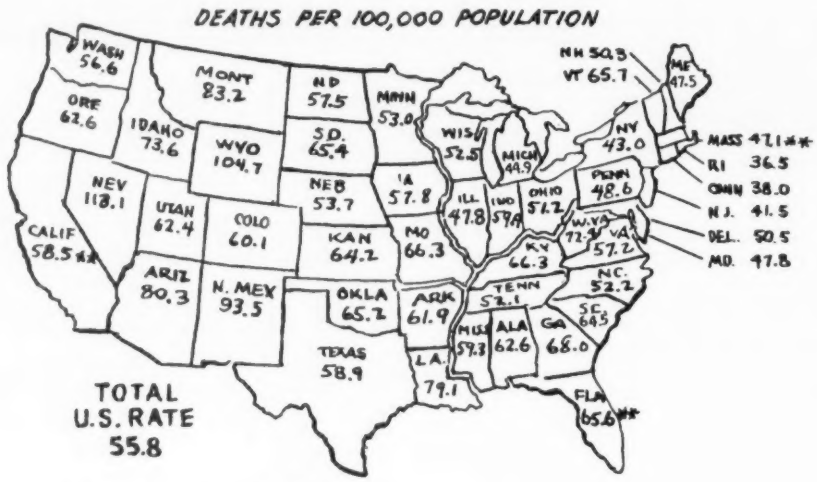
In 1957, the National Safety Council launched its "Back the Attack" program. The Council declared war on accidents—especially traffic accidents. President Eisenhower joined the attack, state governors devoted their efforts toward improving safety programs, and countless communities, schools and civic organizations enlisted in the war on accidents. The result was a *decrease* in traffic accidents for that year. Because of the progress made, "Back the Attack" is being continued this year. Order the "Back the Attack" lessons from the National Safety Council, and learn how to join the battle for safety!

Published by the National Safety Council, 425 No. Michigan Ave., Chicago 11, Ill. Price: three cents each for ten to 99 copies; minimum order ten copies. Lower prices for larger quantities. For information, write the Council, Membership Department.

Prepared by Dr. Vincent McGuire, Associate Professor, Secondary Education, University of Florida, Gainesville, Florida.

Get the Whole Picture

In order to solve any problem, you must, first of all, see the *whole* problem. Shown below is an "accident map" of the U. S. *Study the map carefully and answer the questions that follow:*



**—Estimate, based on incomplete information

1. Find out the population for your state, and compute the death *total* for your state. _____.

2. Where does your state *rank* in regard to death *rate* for *all states?* _____.

3. Determine in which quartile your state will fall according to death *rate.* _____.

4. A. How does your state rank in death *rate* in its quartile? _____.
   B. How does your state rank in death *total* in its quartile? _____.

5. Based on an approximate U. S. population of 170,333,000 and a U. S. death rate of 55.8, how many people were killed in accidents in 1957? (Round out your figure to the nearest 1,000). _____.

6. In 1957, 9,600,000 were injured in accidents. Using this information and your answer to question five above, fill in the following:

The nation's 1957 accident totals can be figured at the following approximate rates:

One Every:	*Per Hour*	*Per Day*	*Per Week*
a. Deaths in U. S.— _____ minutes.			
b. Injuries in U. S.— _____ seconds.			
c. Deaths in my state—			

Answers: The answers to questions one, two, three and four depend upon your state; Number Five—93,000; Number Six-a—six minutes, 11, 260, 1,830; Number Six-b—three seconds, 1,100, 26,300, 184,500; Number Six-c depends on your state.

Yost

(Continued from page 26)

the safety education program at the University of Wisconsin. In addition to the directorship, Yost has been given the title of lecturer in the Department of Education.

Professor Yost is chairman of the Safety Education Section of the American Association for Health, Physical Education and Recreation; member of the Research Committee of the National Safety Council; and a member of the American Driver and Safety Education Association, the College Physical Education Association, the American Association of University Professors and Phi Epsilon Kappa.

SAFETY EDUCATION index available

The yearly index of Volume 37 of SAFETY EDUCATION Magazine is available from the National Safety Council. Volume 37 consists of the issues from September, 1957, to May, 1958.

The index lists all articles and material that appeared in SAFETY EDUCATION. It is classified according to title, author and subject.

Persons or libraries interested in ordering an Index may secure one free of charge by writing the Library, National Safety Council, 425 North Michigan Avenue, Chicago 11, Illinois.

"PARKING IS NOW TAUGHT IN THE CLASSROOM"

A 16 mm sound film specifically designed to teach students the ABC's of parking correctly. It does this simply and easily, with the result that many students are able to park in their first attempt.

Some of the features portrayed in the film are: (1) a full classroom demonstration; (2) a complete street demonstration and (3) the proper use of a modern Portable Parking Board. Every driving instructor will appreciate a print of this easy-to-understand film for his school. Educators rate its teaching value highly.

16 mm Sound - $50.00
(Running time 11 minutes)
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We are the distributor of the Parking Board

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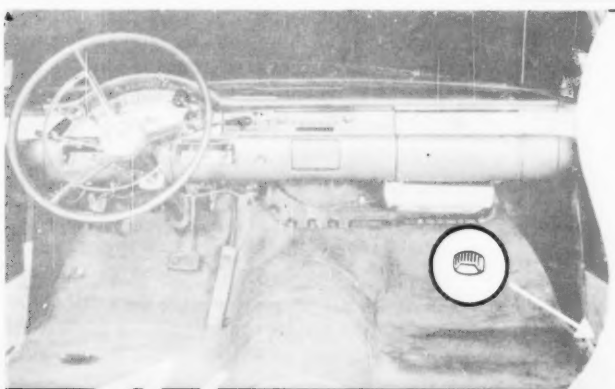

Hydramite

HYDRAULIC BRAKE DUAL CONTROL

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recommended for your Driver Training Program!

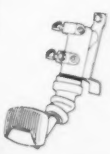
HYDRAMITE division of Stromberg Hydraulic Brake & Coupling Co.
5453 Northwest Highway, Chicago 30, Ill.

Savings!

First cost is your last cost.

Fits all cars including those with power brakes, easily transferred year after year without alterations.

Safety!



Allows instructor plenty of leg room—no fumbling for pedal. Each pedal operates independently. Positive hydraulic application.

No bars or cables to confuse the student. No disturbing noise, rattles or squeaks. Safety ignition cut-off switch provided.

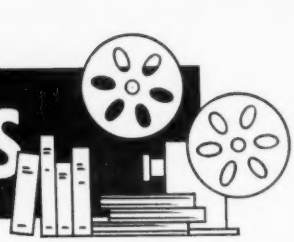
Satisfaction!

Now completely accepted in high school and commercial driver training programs.

Send Now!

Order Hydramite for your school now. Complete with approved automotive fittings and easy installation instructions, $40.

VIEWS and REVIEWS



New Books

Safety Techniques with Radioactive Tracers, by J. D. Boursnell. New York: Cambridge University Press. 1957. xii + 68 pages. $1.75.

THIS is a concise and well-written book designed to introduce the reader to radiological safety.

It consists of a short introduction followed by six chapters which discuss external radiation, personal contamination, contamination and cleanliness, disposal of radioactive waste, laboratory administration and responsibility, and a summary of recommendations for working safely with radioactive materials.

To make the volume more useful to the uninitiated, the author provides appendices covering definitions; maximum permissible levels for contamination of hands, feet, and bench; classification of radioactive isotopes by toxicity; illustrations of protective equipment; a method of putting on and taking off rubber gloves; the use of pipettes; temporary preservation of radioactive animal carcasses; temporary shielding for radioactive sources; and dose levels to the individual. A bibliography of 47 selected references is provided.

The author does not intend this book to constitute a comprehensive volume covering radiological safety. He proposes "to collect together some of the more elementary disciplines which are intended largely as a guide to the beginner. . . ." He is successful in this primary objective. In addition, sections of this book will prove useful to those already engaged in tracer methodology, particularly those involved in biological studies.

Some question arises in my mind about the desirability of the author's implication in Chapter Four that smoking may be permitted in a "cold" laboratory, which he defines as one usually dealing with radioactive material diluted with carrier, or in other ways, as compared with a "hot" laboratory where an active consignment is opened and dispensed (for subsequent use in a cold laboratory) and where, frequently, there is "carrier-free" material. The reviewer feels no smoking should be permitted in any laboratory designated for radioactive studies, with the possible exception of a counting room or an area using only sealed sources.

Readers in this country must remember that this book was written in England; consequently, the maximum permissible doses, levels and concentrations, and waste disposal procedures outlined in this volume should be compared with current U. S. Atomic Energy Commission Regulations as set forth in Title 10—*Atomic Energy*, Chapter One—*Atomic Energy Commission*, Part 20—*Standards For Protection Against Radiation*.

The values given in Tables A, B, C, and D in *Appendix III* under *Maximum Permissible Concentration in Water and in Air* must be read with care to avoid misinterpretation.

This is one of the few books known to the reviewer to be devoted entirely to radiation safety. It will prove to be a worthwhile addition to the library of those working with radioactive tracers, particularly the beginner.

Reviewed by B. G. Dunavant, Department of Radiological Control, Purdue University, Lafayette, Indiana.

Curriculum and the Elementary School Plant, by Helen Heffernan and Charles Bursch. Washington, D. C.: Association for Supervision and Curriculum Development, NEA., 1958. 71 pages. Price: $1.50.

"To make its potential contribution" the elementary school all-purpose classroom "must be spacious, informal, flexible, equipped for a wide range of learning experiences, and conditioned for the safety, health, comfort, efficiency, convenience, and for the delight of the occupants.

"Providing safety . . . goes beyond giving attention to structural, fire and panic, pupil traffic, and building exit safety. The use of the classroom as a workshop, as an art and drama studio, and for science demonstrations compels attention to other aspects of safety. Safe floor surfaces even when wet; glass breakage where low window sills are used; storage and control of tools, chemicals and hazardous equipment; design of portable units to prevent tipping over; attention to flamproofing flammable materials; and safe provision for the use of electricity are but a few of the items that need attention if a

safe classroom environment is to be provided."

The above selections are taken from the chapter of this book on the all-purpose classroom. In addition, the booklet, copiously illustrated with pictures, discusses the various responsibilities of groups for the planning of the building, the relation of the school plant to community facilities, considerations of curriculum and building design; relation of school building to playground, special facilities to implement the curriculum and staff responsibilities for the utilization of the facilities.

Although there are frequent references to safety, those of us who are primarily interested in safety will want to read the book with the particular question in mind, "What does this mean for safety education?" I think we shall not be disappointed.

As a matter of fact the only part of this booklet we could find to be unhappy about is the picture on page ten of the kindergarten room. It is not the high shine on the floor that worries me, as the wax may have been applied so skillfully that it does not constitute a hazard. It is those tiny alphabet blocks right in the path of travel and almost under the feet of the "jet pilot." Perhaps the teacher is just going to step into the picture and use the situation as a real learning experience for safety. We hope so, for a trip or a spill, in addition to possible injury, does nothing to enhance one's "personal dignity," a quality so important to one's safety.

Reviewed by Vivian Weedon, staff representative, Elementary School Section, National Safety Council.

New Films

Boats, Motors and People, American Red Cross. 16 mm., sound, black and white or color. 13:30 minutes. $13.50 for black and white, $35.50 for color. Loan prints in black and white only, available through local Red Cross chapters.

Produced by the American Red Cross in collaboration with Johnson Motors Company, filmed in color at Cypress Gardens, Florida, this film outlines effective security measures for all who operate small craft, particularly outboard motorboats.

The film calls attention to the organizations serving the interests of the safe boatman, safety precautions before boarding a boat, traffic and courtesy rules and rescue techniques. It is very pleasantly done and should be of interest to all who use boats for recreation—a great many people, according to the film.—*Charles French, staff representative, Safety Education Supervisors Section, School and College Division.*

Hi-Lites

. . . from other NSC publications

Eligibility for insurance [for motor scooter riders] hinges on the fact that in most jurisdictions a motor scooter or motor bike is a motor vehicle. Operators of the prescribed age and with an operator's license may apply for insurance under the regular provisions for motor vehicle coverage, or, in the case of under-age juveniles, the parents may apply.

But for parents of juveniles below the licensing age for autos the insurance verdict on scooters is not so clear. Many insurance authorities feel that parents are gambling their economic future if they let Junior operate a scooter without making sure of the insurance facts.

—*Traffic Safety, August, 1958*

. . . Group safety planning must be done efficiently. Many safety meetings are dull because of lack of preparation, absence of clear purpose, shortage of useful information, and non-participation. . . . Good safety meetings need strong leadership and constructive contributions from each individual in the group.

—*National Safety News, August, 1958*

for

SAFETY PATROL EQUIPMENT

Send for new circular of Sam Browne Belts, Arm Bands, Badges, Safety and School Buttons.

We can furnish the Sam Browne Belts in the following grade — adjustable in size.

The "Bull Dog" Brand Best Grade For Long Wear White Webbing 2" wide at $15.00 Per Doz. $1.50 each small lots.

3¼" ARM BANDS Celluloid front—metal back. Web strap and buckle attachment.

No. 33 Blue on white JUNIOR SAFETY PATROL.

No. 44 Green on white.

SAFETY COUNCIL PATROL UNIVERSAL SAFETY WITH TITLE PATROLMAN OR CAPTAIN

Per Dozen ..... $5.00 Lots of 50 .....28c each
Lots of 25 ..... 30c each Lots of 100.....25c each

SIGNAL FLAGS—12x18 Inches

Red cotton bunting, white lettering, "SAFETY PATROL."
Per dozen.....$6.00 Less than dozen.....$1.00 each

Write for our Safety Patrol Circular

OUR RECORD 58 YEARS

AMERICAN BADGE COMPANY

129 West Hubbard, corner La Salle, Chicago 10, Ill.

New Products

Oxygen Re-Breather

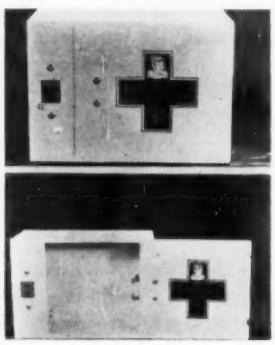
The Dalanator is is new oxygen re-breather, lightweight, portable, and usable in all situations where oxygen is beneficial to health. The Dalanator uses thumb-size metal cartridges of oxygen discharged, as needed, into an accordion-plated breatherbag of silicon-vinyl, then breathed through a mask assembly which contains a chemical filter that traps carbon dioxide during the re-breathing process. The body and mask parts are made of extrusion-molded nylon, one of the strongest plastic materials. The case contains 12 cartridges of oxygen and a rubber head strap, total weight three pounds. Operation is simple and safe. The Palmer Company. (Circle Item 1)

Branding Iron Kit

Keeping athletic equipment from straying has always been a problem. A compact, complete branding-iron kit has been developed, designed to lessen the loss or theft of equipment from playgrounds and schools, called the Voit BK-20 Thermostatic Branding Iron. The iron works as well on wood, leather, and plastic items as it does on rubber. The kit itself contains a strong wooden box, iron, a choice of either "Rec-Dept.," or "Sch. Prop." head, a stand for the iron, wire brush for cleaning the head, and a bristle brush to use on branded item, and complete instructions. The branding operation is simple and safe, producing a lasting, legible identification. W. J. Voit Rubber Corporation. (Circle Item 2)

Safety Surf

Hard surfaces in recreation areas and playgrounds are always a source of accident worries. Safety Surf is a shock-absorbent protective rubber covering for use under playground apparatus or other types of gym and athletic equipment, designed to protect even the most reckless from serious injuries resulting from falls. Safety Surf is assembled from four basic, interchangeable, interlocking rubber blocks, one inch thick, covering an area in modules of two feet in any direction. No cement or mastic is required, and there is no special maintenance expense. Mitchell Rubber Products, Inc. (Circle Item 3)



Save-A-Tot

"Save-A-Tot" is specifically designed as a "Childproof Safe for Drugs." It's a highly publicized fact that poisonous or toxic drugs must be kept out of the reach of children. It is steel constructed, white enamel finish, approximately 4"x5"x7". It will fit into any manufactured medicine cabinet and has a sliding door to allow the cabinet door to be closed. The three roller combination lock has 1,000 number combinations which can be reset at the parent's own discretion. Civilian Defense Quartermaster Service. (Circle Item 4)

SAFETY EDUCATION—NEW PRODUCTS SEPTEMBER, 1958

425 N. Michigan Ave., Chicago 11, Ill.

Please send me more information on the items circled below:

1 2 3 4

Name.....

Title.....

Address.....

City.....

State.....

tri-state college meeting to be held . . .

"Accident Prevention—A Challenge to Higher Education" is the subject of a tri-state safety conference to be held November 10 for safety representatives of Ohio, Kentucky and Indiana colleges and universities.

The Conference will be held at Western College for Women, Oxford, Ohio, in cooperation with the National Safety Council. Speakers and discussion groups will delve into (1) Safety in Science; (2) The Psychology of Safety; (3) The Economics of Safety; and (4) Education for Safety. Although it is impossible to exhaust these subjects in a one-day conference, broad bases for continuing study will be presented.

Dr. Howard L. Bevis, chairman of the President's Committee on Scientists and Engineers, will be the keynote speaker.

NSC receives $153,600 . . .

The National Safety Council has announced receipt of a grant of $153,600 from the Automotive Safety Foundation to finance the *Annual Inventory of Traffic Safety Activities* and other projects during 1958. The *Annual Inventory* measures the traffic management and accident prevention work of the 48 states and more than 1,200 cities against the national standards and determines where improvements are needed.

The Automotive Safety Foundation is a nonprofit organization dedicated to education and research for safe, efficient highway transportation. It is supported by more than 600 companies in the automotive and highway construction field.

Philadelphia joins wise owls . . .

The School District of Philadelphia became the 2,000th chapter in the Wise Owl Club of America recently. William E. Brunton, director of vocational schools, accepted the charter for the District at the 1958 Sight Saving Conference held by the National Association for the Prevention of Blindness.

More than 14,000 men, women and students whose sight has been saved in on-the-job accidents through use of safety eye-wear have been honored with individual Wise Owl membership to date.

parochials to get safety glasses . . .

All school children attending parochial schools in Cleveland, Ohio, will soon be covered by a unique eye protection program, according to the *Prevention of Blindness News*.

Of 125,000 Catholic school children in the Cleveland area, all those wearing eye-glasses will be required to obtain safety glasses when replacing present glasses.

Milton M. Bowman, commissioner of Employees' Accident Control of the City of Cleveland, who was responsible for originating the plan, says that "children getting their first pair of prescription glasses will be required to have them made of the safety variety."

Parents are being informed that, for their children's sake, shatterproof safety glasses with non-flammable frames are being made mandatory throughout the school system.

Allstate supports driver teacher training . . .

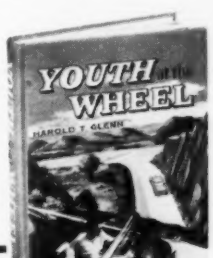
The Allstate Foundation has contributed $66,000 this year to 36 colleges and universities throughout the country for the purpose of training high school driving instructors. The 36 grants ranged from $1,000 to $2,500, and will be used as scholarships for teachers.

Since the Foundation was started in 1953, college courses aided by the Foundation have produced more than 5,000 high school driving instructors. Of these 5,000, 3,681 received Foundation scholarships to attend the course.

Presenting . . .

YOUTH AT THE WHEEL

By Harold T. Glenn



The newest—and finest —driver training text for senior high students.

Forcefully and skillfully written specifically for teenagers, this text thoroughly covers each phase of driver training—the driver, his car, its care, its operation, safety, laws and every other important detail are dramatically presented. Interest is held, throughout the book's 416 pages, by over 675 large, powerful illustrations. Discussion topics and tests with each chapter. Teacher key included..... **$3.60**

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Please send _____ copies of YOUTH AT THE WHEEL at $3.60 each. $_____ is enclosed in payment.

☐ Send C.O.D. ☐ Send billed on 30-day approval.

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City_____ State_____

Satisfaction Guaranteed.

TRADE PUBLICATIONS

The following publications are intended for the guidance of those responsible for the purchase of equipment to promote safety in the school. The coupon below will bring FREE to responsible school personnel any or all of those listed.

1. **"Rub-Bub School Bus Products"**—Bulletin LL-7029 is a four-page illustrated brochure describing various items in the Rub-Bub School Bus Safety Package, offered by Samuel Moore and Co., Transportation Div., Mantua, Ohio. The catalog includes Rub-Bub Step-Plate, Dri-Foot Flooring, Safety Smooth Flooring, Safety Entrance Plate and Dekoron Sanchions and Seat Grab Rails.

2. **"Emco Classroom Wardrobes"**—Are the subject of a new 12-page catalog issued by Equipment Mfg. Co., Inc., 1400 Spruce St., Kansas City 27, Mo. The new Saf-T-Dor Wardrobe with rubber door moldings to safeguard fingers and hands from being bruised or crushed are pictured and described in the catalog, which features all classroom wardrobe models.

3. **"Individual Quality Seating Equipment"**—Is the subject of a 24-page catalog printed in full color, available from the American Desk Mfg. Co., Temple, Texas. Color and black and white photographs of all units in the complete line of seating equipment for schools and colleges are supplemented with descriptive information, specifications and sketches.

4. **"Electronic Training Devices"**—Is a new catalog available from Training Devices and Programs, R. C. A. Service Co., Building 201-1, Camden 8, N. J. The two basic devices described in the catalog cover training in fundamentals, radio, television, microwave, radar and other electronic developments.

5. **"Six Major Wayne Rolling Gymstands Advances"**—Is the title of a 4-page bulletin available from Wayne Iron Works, Wayne, Pa. The improvements include a new rolling foot system providing added foot support; new braking system for increased holding action; new power operation for easier one-man operation; new Philippine Mahogany Construction, etc.

6. **"Lockerbaskets for Changerooms"**—New 8-page booklet fully describes and details the design of changerooms employing chain operated Lockerbaskets for overhead storage of clothing and personal effects. Included is a ¼" scale drawing sheet with 1'-9" modules imprinted thereon for automatically giving the location of each Lockerbasket, locking rails, and aisles. Complete tables for selecting overhead support members, and full details for punching and fabricating these members are included, along with details of changeroom benches. Moore Company.

SAFETY EDUCATION—TRADE PUBLICATIONS SEPTEMBER 1958

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Congress *(Continued from page 12)*

driver education course in the Cincinnati public schools.

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For hotel reservations, write *now* to The Housing Bureau, 46th National Safety Congress and Exposition, National Safety Council, 425 No. Michigan Avenue, Chicago 11, Illinois●

Research in Safety Education

(Continued from page 7)

underlying cause of traffic accidents, it was not until the 1940's that much needed research in measuring driver attitudes was reported.

2. It is difficult to attribute traffic accidents to one specific cause. The human factor (inability of individuals to exert self-control and follow safe practices) is undoubtedly the major cause of traffic accidents.

3. Traffic courts, which hand down punishment in the forms of fines or short-term confinements, do very little to correct faulty driving attitudes. Of more importance are traffic violator schools, which aim at the correction of faulty attitudes.

4. In driver education courses, those items pertaining to the driver's attitude should receive the most emphasis. Whenever possible, both classroom and practice driving instruction should be offered in accordance with state department of education rulings.

5. Programs of high school driver education have gained public support. As of 1957, 14 states were providing some form of financial assistance to local school districts.

Right now the most needed research is in the *attitude* area. We particularly need to understand how attitudes are created and nourished. We need valid measuring instruments which portray personal and emotional factors identifying the person who is having accidents or likely to have accidents.

A study is good only if its findings are applied. Too often, graduate students consider the completion of a thesis or dissertation as an end in itself. Whether the findings are applicable to a particular community, county, state or nation is irrelevant—let's *apply what is known* in the local situation.

Particularly needed today is the establishment of one central agency to which all completed studies could be reported. This agency, in turn, could disseminate the findings of each study for public consumption●

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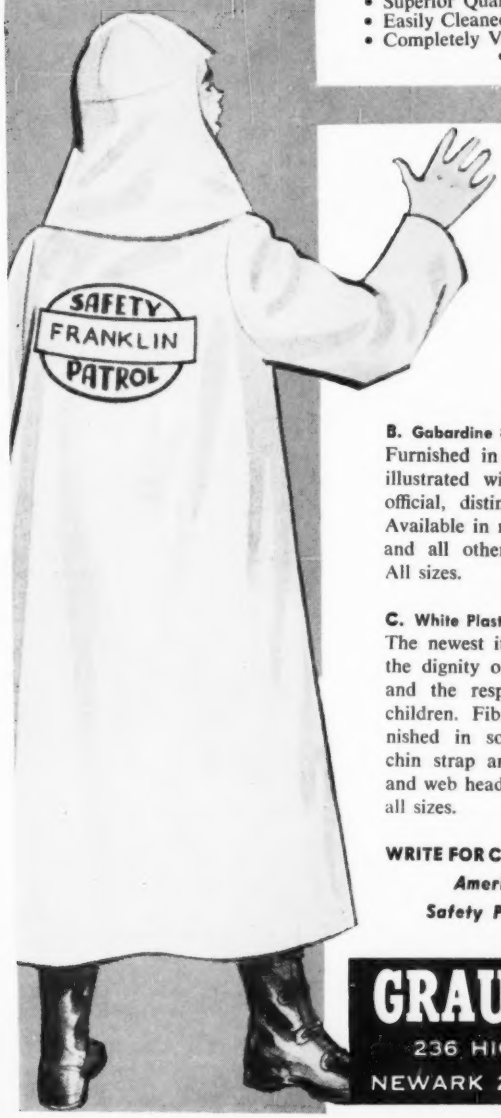

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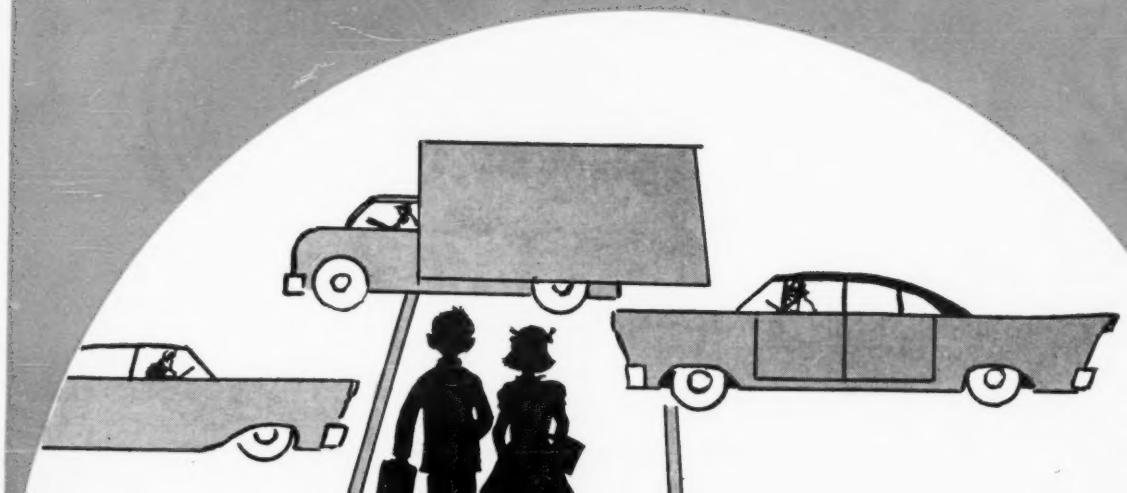

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